

# CDH1/CDH2/CDH3/CDH4 (Human) Cell-Based ELISA Kit

Catalog # KA2621

Size 1 Kit

## Specification

|                            |                                                                                                                                                                              |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product Description</b> | CDH1/CDH2/CDH3/CDH4 (Human) Cell-Based ELISA Kit is an indirect enzyme-linked immunoassay for qualitative determination of CDH1/CDH2/CDH3/CDH4 expression in cultured cells. |
| <b>Suitable Sample</b>     | Attached Cell, Loosely Attached Cell, Suspension Cell                                                                                                                        |
| <b>Label</b>               | HRP-conjugated                                                                                                                                                               |
| <b>Detection Method</b>    | Colorimetric                                                                                                                                                                 |
| <b>Assay Type</b>          | Qualitative                                                                                                                                                                  |
| <b>Reactivity</b>          | Human, Mouse, Rat                                                                                                                                                            |
| <b>Regulation Status</b>   | For research use only (RUO)                                                                                                                                                  |
| <b>Storage Instruction</b> | Store the kit at 4°C.                                                                                                                                                        |

## Applications

- Qualitative

## Gene Info — CDH1

|                           |                                                                                                                |
|---------------------------|----------------------------------------------------------------------------------------------------------------|
| <b>Entrez GeneID</b>      | <a href="#">999</a>                                                                                            |
| <b>Protein Accession#</b> | <a href="#">P12830 (Gene ID : 999);P19022 (Gene ID : 1000);P22223 (Gene ID : 1001);P55283 (Gene ID : 1002)</a> |
| <b>Gene Name</b>          | CDH1                                                                                                           |
| <b>Gene Alias</b>         | Arc-1, CD324, CDHE, ECAD, LCAM, UVO                                                                            |
| <b>Gene Description</b>   | cadherin 1, type 1, E-cadherin (epithelial)                                                                    |

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Omim ID            | <a href="#">137215 192090</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Summary       | This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a trans membrane region and a highly conserved cytoplasmic tail. Mutations in this gene are correlated with gastric, breast, colorectal, thyroid and ovarian cancer. Loss of function is thought to contribute to progression in cancer by increasing proliferation, invasion, and/or metastasis. The ectodomain of this protein mediates bacterial adhesion to mammalian cells and the cytoplasmic domain is required for internalization. Identified transcript variants arise from mutation at consensus splice sites. [provided by RefSeq] |
| Other Designations | cadherin 1, E-cadherin (epithelial) cadherin 1, type 1 calcium-dependent adhesion protein, epithelial cell-CAM 120/80 uvomorulin                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Gene Info — CDH2

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID      | <a href="#">1000</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Protein Accession# | <a href="#">P12830 (Gene ID : 999);P19022 (Gene ID : 1000);P22223 (Gene ID : 1001);P55283 (Gene ID : 1002)</a>                                                                                                                                                                                                                                                                                                                                                                                                               |
| Gene Name          | CDH2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| Gene Alias         | CD325, CDHN, CDw325, NCAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Description   | cadherin 2, type 1, N-cadherin (neuronal)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Omim ID            | <a href="#">114020</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Gene Summary       | This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a trans membrane region and a highly conserved cytoplasmic tail. The protein functions during gastrulation and is required for establishment of left-right asymmetry. At certain central nervous system synapses, presynaptic to postsynaptic adhesion is mediated at least in part by this gene product. [provided by RefSeq] |
| Other Designations | N-cadherin 1 cadherin 2, N-cadherin (neuronal) cadherin 2, type 1 calcium-dependent adhesion protein, neuronal neural cadherin                                                                                                                                                                                                                                                                                                                                                                                               |

## Gene Info — CDH3

|               |                      |
|---------------|----------------------|
| Entrez GeneID | <a href="#">1001</a> |
|---------------|----------------------|

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Protein Accession# | <a href="#">P12830 (Gene ID : 999);P19022 (Gene ID : 1000);P22223 (Gene ID : 1001);P55283 (Gene ID : 1002)</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Gene Name          | CDH3                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Gene Alias         | CDHP, HJMD, PCAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Gene Description   | cadherin 3, type 1, P-cadherin (placental)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Omim ID            | <a href="#">114021 601553</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Gene Summary       | This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. This gene is located in a six-cadherin cluster in a region on the long arm of chromosome 16 that is involved in loss of heterozygosity events in breast and prostate cancer. In addition, aberrant expression of this protein is observed in cervical adenocarcinomas. Mutations in this gene have been associated with congenital hypotrichosis with juvenile macular dystrophy. [provided by RefSeq] |
| Other Designations | cadherin 3, type 1 calcium-dependent adhesion protein, placental                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## Gene Info — CDH4

|                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Entrez GeneID      | <a href="#">1002</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Protein Accession# | <a href="#">P12830 (Gene ID : 999);P19022 (Gene ID : 1000);P22223 (Gene ID : 1001);P55283 (Gene ID : 1002)</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Gene Name          | CDH4                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Gene Alias         | CAD4, FLJ22202, FLJ40547, MGC126700, MGC138355, RCAD                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Gene Description   | cadherin 4, type 1, R-cadherin (retinal)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Omim ID            | <a href="#">603006</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Gene Ontology      | <a href="#">Hyperlink</a>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Gene Summary       | This gene is a classical cadherin from the cadherin superfamily. The encoded protein is a calcium-dependent cell-cell adhesion glycoprotein comprised of five extracellular cadherin repeats, a transmembrane region and a highly conserved cytoplasmic tail. Based on studies in chicken and mouse, this cadherin is thought to play an important role during brain segmentation and neuronal outgrowth. In addition, a role in kidney and muscle development is indicated. Of particular interest are studies showing stable cis-heterodimers of cadherins 2 and 4 in cotransfected cell lines. Previously thought to interact in an exclusively homophilic manner, this is the first evidence of cadherin heterodimerization. [provided by RefSeq] |

**Other Designations**OTTHUMP00000031444|R-cadherin|cadherin 4, type 1|cadherin 4, type 1, preproprotein|retinal c  
adherin**Pathway**

- [Adherens junction](#)
- [Arrhythmogenic right ventricular cardiomyopathy \(ARVC\)](#)
- [Bladder cancer](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Cell adhesion molecules \(CAMs\)](#)
- [Endometrial cancer](#)
- [Melanoma](#)
- [Pathogenic Escherichia coli infection - EHEC](#)
- [Pathways in cancer](#)
- [Thyroid cancer](#)

**Disease**

- [Adenocarcinoma](#)
- [Asthma](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Carcinoma](#)
- [Cerebral Hemorrhage](#)
- [Chronic Disease](#)

- [Cleft Lip](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cleft Palate](#)
- [Colitis](#)
- [Colitis](#)
- [Colorectal Neoplasms](#)
- [Crohn Disease](#)
- [Disease Progression](#)
- [Esophageal Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glaucoma](#)
- [Head and Neck Neoplasms](#)
- [Head and Neck Neoplasms](#)
- [Helicobacter Infections](#)
- [Hepatitis B](#)
- [Hypertension](#)
- [Infant](#)
- [Intracranial Hemorrhages](#)
- [Kidney Diseases](#)
- [Kidney Neoplasms](#)
- [Laryngeal Neoplasms](#)

- [Laryngeal Neoplasms](#)
- [Leiomyoma](#)
- [Liver Neoplasms](#)
- [Low Tension Glaucoma](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Meningeal Neoplasms](#)
- [Meningioma](#)
- [Mouth Neoplasms](#)
- [Mouth Neoplasms](#)
- [Nasopharyngeal Neoplasms](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplastic Syndromes](#)
- [Obesity](#)
- [Ocular Hypertension](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Pharyngeal Neoplasms](#)
- [Prostate cancer](#)
- [Prostatic Hyperplasia](#)

- [Prostatic Neoplasms](#)
- [Pulmonary Disease](#)
- [Respiratory Syncytial Virus Infections](#)
- [Stomach Neoplasms](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Tobacco Use Disorder](#)
- [Tobacco Use Disorder](#)
- [Tooth Abnormalities](#)
- [Tooth Abnormalities](#)
- [Ureteral Neoplasms](#)
- [Urinary Bladder Neoplasms](#)
- [Urinary Calculi](#)
- [Urologic Neoplasms](#)
- [Uterine Neoplasms](#)
- [Werner syndrome](#)