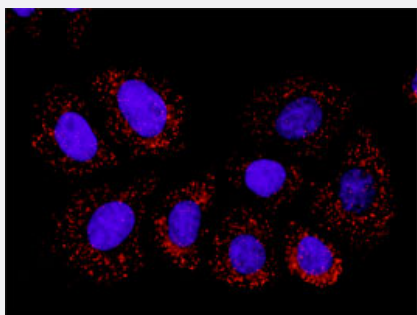


HDAC2 & HIF1A Protein Protein Interaction Antibody Pair

Catalog # DI0598

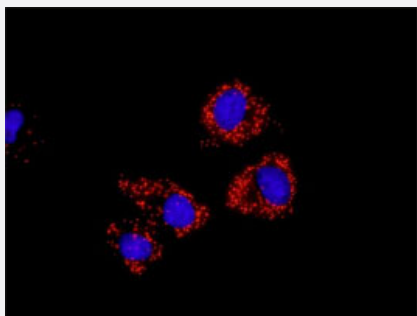
Size 1 Set

Applications



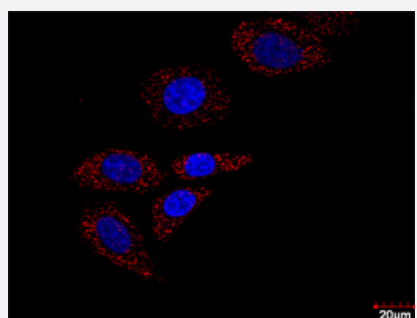
In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between HDAC2 and HIF1A. HT-29 cells were stained with anti-HDAC2 rabbit purified polyclonal antibody 1:100 and anti-HIF1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



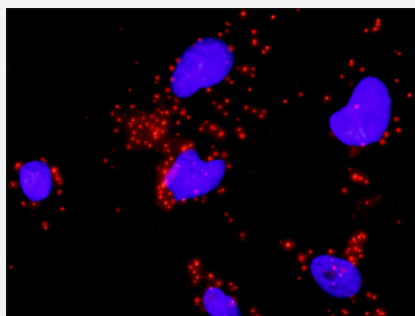
In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between HDAC2 and HIF1A. A-549 cells were stained with anti-HDAC2 rabbit purified polyclonal antibody 1:100 and anti-HIF1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



In situ Proximity Ligation Assay (Cell)

Confocal microscopy image of Proximity Ligation Assay of protein-protein interactions between HDAC2 and HIF1A. HT-29 cells were stained with anti-HDAC2 rabbit purified polyclonal antibody 1:100 and anti-HIF1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



Representative image of Proximity Ligation Assay of protein-protein interactions between HDAC2 and HIF1A. HeLa cells were stained with anti-HDAC2 rabbit purified polyclonal antibody 1:1200 and anti-HIF1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Specification

Product Description

This protein protein interaction antibody pair set comes with two antibodies to detect the protein-protein interaction, one against the HDAC2 protein, and the other against the HIF1A protein for use in [in situ Proximity Ligation Assay](#). [See Publication Reference below](#).

Reactivity

Human

Quality Control Testing

Protein protein interaction immunofluorescence result.

Representative image of Proximity Ligation Assay of protein-protein interactions between HDAC2 and HIF1A. HeLa cells were stained with anti-HDAC2 rabbit purified polyclonal antibody 1:1200 and anti-HIF1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex. The images were analyzed using an optimized freeware (BlobFinder) download from The Centre for Image Analysis at Uppsala University.

Supplied Product

Antibody pair set content:

1. HDAC2 rabbit purified polyclonal antibody (100 ug)
2. HIF1A mouse monoclonal antibody (40 ug)

*Reagents are sufficient for at least 30-50 assays using recommended protocols.

Storage Instruction

Store reagents of the antibody pair set at -20°C or lower. Please aliquot to avoid repeated freeze thaw cycle. Reagents should be returned to -20°C storage immediately after use.

Applications

● In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between HDAC2 and HIF1A. HT-29 cells were stained with anti-HDAC2 rabbit purified polyclonal antibody 1:100 and anti-HIF1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

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- In situ* Proximity Ligation Assay (Cell)

Confocal microscopy image of Proximity Ligation Assay of protein-protein interactions between HDAC2 and HIF1A. HT-29 cells were stained with anti-HDAC2 rabbit purified polyclonal antibody 1:100 and anti-HIF1A mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).

Gene Info — HDAC2

Entrez GeneID	3066
Gene Name	HDAC2
Gene Alias	RPD3, YAF1
Gene Description	histone deacetylase 2
Omim ID	605164
Gene Ontology	Hyperlink
Gene Summary	This gene product belongs to the histone deacetylase family. Histone deacetylases act via the formation of large multiprotein complexes and are responsible for the deacetylation of lysine residues on the N-terminal region of the core histones (H2A, H2B, H3 and H4). This protein also forms transcriptional repressor complexes by associating with many different proteins, including YY1, a mammalian zinc-finger transcription factor. Thus it plays an important role in transcriptional regulation, cell cycle progression and developmental events. [provided by RefSeq]
Other Designations	OTTHUMP00000040427 YY1-associated factor 1 transcriptional regulator homolog RPD3

Gene Info — HIF1A

Entrez GeneID	3091
Gene Name	HIF1A
Gene Alias	HIF-1alpha, HIF1, HIF1-ALPHA, MOP1, PASD8, bHLHe78
Gene Description	hypoxia inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)
Omim ID	603348
Gene Ontology	Hyperlink

Gene Summary

Hypoxia-inducible factor-1 (HIF1) is a transcription factor found in mammalian cells cultured under reduced oxygen tension that plays an essential role in cellular and systemic homeostatic responses to hypoxia. HIF1 is a heterodimer composed of an alpha subunit and a beta subunit. The beta subunit has been identified as the aryl hydrocarbon receptor nuclear translocator (ARNT). This gene encodes the alpha subunit of HIF-1. Overexpression of a natural antisense transcript (aHIF) of this gene has been shown to be associated with nonpapillary renal carcinomas. Two alternative transcripts encoding different isoforms have been identified. [provided by RefSeq]

Other Designations

ARNT interacting protein|hypoxia-inducible factor 1, alpha subunit|hypoxia-inducible factor 1, alpha subunit (basic helix-loop-helix transcription factor)|member of PAS superfamily 1

Pathway

- [Cell cycle](#)
- [Chronic myeloid leukemia](#)
- [mTOR signaling pathway](#)
- [Notch signaling pathway](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Renal cell carcinoma](#)

Disease

- [ACTH-Secreting Pituitary Adenoma](#)
- [Acute Disease](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Altitude Sickness](#)
- [Angina Pectoris](#)
- [Anoxia](#)
- [Asthma](#)
- [Breast cancer](#)

- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cellulitis](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Colorectal Neoplasms](#)
- [Coronary Disease](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Diabetic Retinopathy](#)
- [Disease Susceptibility](#)
- [Drug Toxicity](#)
- [Edema](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Esophageal Neoplasms](#)
- [Femur Head Necrosis](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Giant Cell Arteritis](#)
- [Gilbert Disease](#)
- [Hot Flashes](#)

- [Hyperbilirubinemia](#)
- [Hypercholesterolemia](#)
- [Intracranial Arteriosclerosis](#)
- [Intracranial Thrombosis](#)
- [Kidney Failure](#)
- [Kidney Neoplasms](#)
- [Liver Cirrhosis](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Microsatellite Instability](#)
- [Mouth Neoplasms](#)
- [Myocardial Infarction](#)
- [Myocardial Ischemia](#)
- [Neoplasm Invasiveness](#)
- [Neoplasms](#)
- [Neoplasms](#)
- [Neovascularization](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Ovarian Neoplasms](#)
- [Peripheral Arterial Disease](#)
- [Polycythemia](#)
- [Pre-Eclampsia](#)

- [Prostate cancer](#)
- [Prostatic Neoplasms](#)
- [Renal Insufficiency](#)
- [Retinopathy of Prematurity](#)
- [Scleroderma](#)
- [Sleep Apnea](#)
- [Stomach Neoplasms](#)
- [Ulcer](#)
- [Urinary Bladder Neoplasms](#)
- [Uterine Cervical Neoplasms](#)