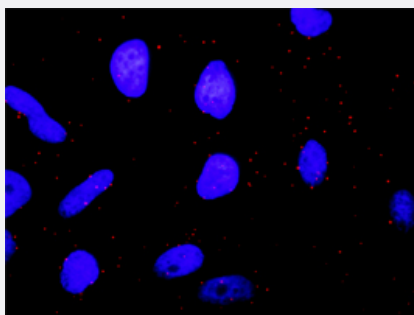


MAPK3 & BRAF Protein Protein Interaction Antibody Pair

Catalog # DI0237

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between MAPK3 and BRAF. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-BRAF 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 MAPK3 protein, and the other against the BRAF 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 MAPK3 and BRAF. HeLa cells were stained with anti-MAPK3 rabbit purified polyclonal antibody 1:1200 and anti-BRAF 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. MAPK3 rabbit purified polyclonal antibody (100 ug)
2. BRAF 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)

Gene Info — BRAF

Entrez GeneID	673
Gene Name	BRAF
Gene Alias	B-RAF1, BRAF1, FLJ95109, MGC126806, MGC138284, RAFB1
Gene Description	v-raf murine sarcoma viral oncogene homolog B1
Omim ID	115150 164757 211980
Gene Ontology	Hyperlink
Gene Summary	This gene encodes a protein belonging to the raf/mil family of serine/threonine protein kinases. This protein plays a role in regulating the MAP kinase/ERKs signaling pathway, which affects cell division, differentiation, and secretion. Mutations in this gene are associated with cardiofaciocutaneous syndrome, a disease characterized by heart defects, mental retardation and a distinctive facial appearance. Mutations in this gene have also been associated with various cancers, including non-Hodgkin lymphoma, colorectal cancer, malignant melanoma, thyroid carcinoma, non-small cell lung carcinoma, and adenocarcinoma of lung. A pseudogene, which is located on chromosome X, has been identified for this gene. [provided by RefSeq]
Other Designations	94 kDa B-raf protein B-Raf proto-oncogene serine/threonine-protein kinase (p94) Murine sarcoma viral (v-raf) oncogene homolog B1

Gene Info — MAPK3

Entrez GeneID	5595
Gene Name	MAPK3
Gene Alias	ERK1, HS44KDAP, HUMKER1A, MGC20180, P44ERK1, P44MAPK, PRKM3
Gene Description	mitogen-activated protein kinase 3
Omim ID	601795
Gene Ontology	Hyperlink

Gene Summary

The protein encoded by this gene is a member of the MAP kinase family. MAP kinases, also known as extracellular signal-regulated kinases (ERKs), act in a signaling cascade that regulates various cellular processes such as proliferation, differentiation, and cell cycle progression in response to a variety of extracellular signals. This kinase is activated by upstream kinases, resulting in its translocation to the nucleus where it phosphorylates nuclear targets. Alternatively spliced transcript variants encoding different protein isoforms have been described. [provided by RefSeq]

Other Designations

OTTHUMP00000174538|OTTHUMP00000174540|extracellular signal-regulated kinase 1|extracellular signal-related kinase 1

Pathway

- [Acute myeloid leukemia](#)
- [Acute myeloid leukemia](#)
- [Adherens junction](#)
- [Axon guidance](#)
- [B cell receptor signaling pathway](#)
- [Bladder cancer](#)
- [Bladder cancer](#)
- [Chemokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Colorectal cancer](#)
- [Dorso-ventral axis formation](#)
- [Endometrial cancer](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)

- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Focal adhesion](#)
- [Gap junction](#)
- [Glioma](#)
- [Glioma](#)
- [GnRH signaling pathway](#)
- [Insulin signaling pathway](#)
- [Insulin signaling pathway](#)
- [Long-term depression](#)
- [Long-term depression](#)
- [Long-term potentiation](#)
- [Long-term potentiation](#)
- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanogenesis](#)
- [Melanoma](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)
- [mTOR signaling pathway](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Natural killer cell mediated cytotoxicity](#)
- [Neurotrophin signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Non-small cell lung cancer](#)

- [Pancreatic cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prion diseases](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Regulation of actin cytoskeleton](#)
- [Regulation of actin cytoskeleton](#)
- [Renal cell carcinoma](#)
- [Renal cell carcinoma](#)
- [T cell receptor signaling pathway](#)
- [TGF-beta signaling pathway](#)
- [Thyroid cancer](#)
- [Thyroid cancer](#)
- [Toll-like receptor signaling pathway](#)
- [Type II diabetes mellitus](#)
- [Vascular smooth muscle contraction](#)
- [Vascular smooth muscle contraction](#)
- [VEGF signaling pathway](#)

Disease

- [Abnormalities](#)
- [Adenocarcinoma](#)
- [Adenoma](#)
- [Adrenal Cortex Neoplasms](#)

- [Alcoholism](#)
- [Articulation Disorders](#)
- [Asthma](#)
- [Astrocytoma](#)
- [Autistic Disorder](#)
- [Brain Neoplasms](#)
- [Breast cancer](#)
- [Breast Neoplasms](#)
- [Carcinoma](#)
- [Cell Transformation](#)
- [Chromosomal Instability](#)
- [Chromosome Aberrations](#)
- [Cognition](#)
- [Cognition Disorders](#)
- [Colon cancer](#)
- [Colonic Neoplasms](#)
- [Colonic Polyps](#)
- [Colorectal Neoplasms](#)
- [Common Bile Duct Neoplasms](#)
- [Craniofacial Abnormalities](#)
- [Cystadenocarcinoma](#)
- [Cystadenoma](#)
- [Developmental Disabilities](#)
- [Dilatation](#)
- [Disease Models](#)
- [Disease Progression](#)

- [Diseases in Twins](#)
- [Dyslexia](#)
- [Ectodermal Dysplasia](#)
- [Endometrial Hyperplasia](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Eosinophilia](#)
- [Esophageal Neoplasms](#)
- [Gastrointestinal Stromal Tumors](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glioma](#)
- [Goiter](#)
- [Hashimoto Disease](#)
- [Head and Neck Neoplasms](#)
- [Hearing](#)
- [Heart Defects](#)
- [Hyperpigmentation](#)
- [Hyperplasia](#)
- [Immunologic Deficiency Syndromes](#)
- [Language Disorders](#)
- [Liver Neoplasms](#)
- [Lung Neoplasms](#)
- [Lymphatic Metastasis](#)
- [Lymphoma](#)
- [Malignant melanoma](#)

- [Melanoma](#)
- [Memory](#)
- [Microsatellite Instability](#)
- [Motor Skills](#)
- [Nasopharyngeal Neoplasms](#)
- [Necrosis](#)
- [Neoplasm Invasiveness](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Nerve Sheath Neoplasms](#)
- [Neurofibromatosis](#)
- [Neurofibromatosis 1](#)
- [Nevus](#)
- [Noonan Syndrome](#)
- [Obesity](#)
- [Ovarian cancer](#)
- [Ovarian Neoplasms](#)
- [Pancreatic cancer](#)
- [Pancreatic Neoplasms](#)
- [Papillomavirus Infections](#)
- [Precancerous Conditions](#)
- [Prostatic Neoplasms](#)
- [Ras oncogene](#)
- [Rectal Neoplasms](#)
- [Recurrence](#)

- [Salivary Gland Neoplasms](#)
- [Skin Neoplasms](#)
- [Stomach Neoplasms](#)
- [Syndrome](#)
- [Testicular Neoplasms](#)
- [Thyroid Diseases](#)
- [Thyroid Neoplasms](#)
- [Thyroid Nodule](#)
- [Thyroiditis](#)
- [Tobacco Use Disorder](#)
- [Urinary Bladder Neoplasms](#)