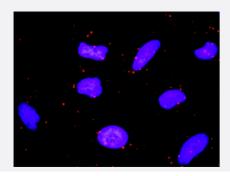


ATF4 & FOS Protein Protein Interaction Antibody Pair

Catalog # DI0361 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between ATF4 and FOS. HeLa cells were stained with anti-ATF4 rabbit purified polyclonal antibody 1:1200 and anti-FOS 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-prot ein interaction, one against the ATF4 protein, and the other against the FOS protein for use in <i>in situ</i> 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 ATF4 and FOS. HeLa cells were stained with anti-ATF4 rabbit purified polyclonal antibody 1:1200 and anti-FO S 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. ATF4 rabbit purified polyclonal antibody (100 ug) 2. FOS 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 tha w cycle. Reagents should be returned to -20°C storage immediately after use. |

Applications



• In situ Proximity Ligation Assay (Cell)

| Gene Info — ATF4 | |
|--------------------|---|
| Entrez GenelD | 468 |
| Gene Name | ATF4 |
| Gene Alias | CREB-2, CREB2, TAXREB67, TXREB |
| Gene Description | activating transcription factor 4 (tax-responsive enhancer element B67) |
| Omim ID | <u>604064</u> |
| Gene Ontology | <u>Hyperlink</u> |
| Gene Summary | This gene encodes a transcription factor that was originally identified as a widely expressed mam malian DNA binding protein that could bind a tax-responsive enhancer element in the LTR of HTL V-1. The encoded protein was also isolated and characterized as the cAMP-response element binding protein 2 (CREB-2). The protein encoded by this gene belongs to a family of DNA-binding proteins that includes the AP-1 family of transcription factors, cAMP-response element binding proteins (CREBs) and CREB-like proteins. These transcription factors share a leucine zipper region that is involved in protein-protein interactions, located C-terminal to a stretch of basic amino acids that functions as a DNA binding domain. Two alternative transcripts encoding the same protein have been described. Two pseudogenes are located on the X chromsome at q28 in a region containing a large inverted duplication. [provided by RefSeq |
| Other Designations | activating transcription factor 4 cAMP response element-binding protein 2 |

| Gene Info — FOS | | |
|------------------|--|--|
| Entrez GeneID | 2353 | |
| Gene Name | FOS | |
| Gene Alias | AP-1, C-FOS | |
| Gene Description | v-fos FBJ murine osteosarcoma viral oncogene homolog | |
| Omim ID | <u>164810</u> | |
| Gene Ontology | <u>Hyperlink</u> | |



Product Information

| Gene Summary | The Fos gene family consists of 4 members: FOS, FOSB, FOSL1, and FOSL2. These genes enc ode leucine zipper proteins that can dimerize with proteins of the JUN family, thereby forming the t ranscription factor complex AP-1. As such, the FOS proteins have been implicated as regulators of cell proliferation, differentiation, and transformation. In some cases, expression of the FOS gen e has also been associated with apoptotic cell death. [provided by RefSeq |
|--------------------|--|
| Other Designations | FBJ murine osteosarcoma viral (v-fos) oncogene homolog (oncogene FOS) activator protein 1 cel lular oncogene c-fos |

Pathway

- B cell receptor signaling pathway
- Colorectal cancer
- GnRH signaling pathway
- Long-term potentiation
- MAPK signaling pathway
- MAPK signaling pathway
- Neurotrophin signaling pathway
- Pathways in cancer
- Prostate cancer
- T cell receptor signaling pathway
- Toll-like receptor signaling pathway

Disease

- Anorexia Nervosa
- Asthma
- Bipolar Disorder
- Bronchiolitis
- Bulimia
- Cardiovascular Diseases



- Diabetes Mellitus
- Disease Models
- Edema
- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Infant
- Kidney Failure
- Lung Neoplasms
- Mental Disorders
- Neuropsychological Tests
- Osteoporosis
- Ovarian Neoplasms
- Pulmonary Disease
- Respiratory Syncytial Virus Infections
- Schizophrenia
- Urinary Bladder Neoplasms
- Werner syndrome