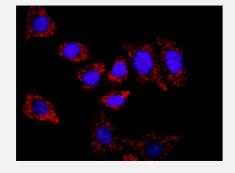


# IKBKB & FOXO3 Protein Protein Interaction Antibody Pair

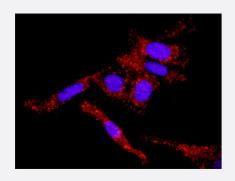
Catalog # DI0210 Size 1 Set

## **Applications**



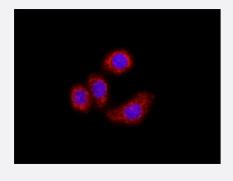
### In situ Proximity Ligation Assay (Cell)

Representative image of Proximity Ligation Assay of protein-protein interactions between IKBKB and FOXO3. HT-29 cells were stained with anti-IKBKB rabbit purified polyclonal antibody 1:100 and anti-FOXO3 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)

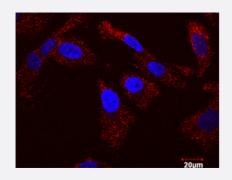
Representative image of Proximity Ligation Assay of protein-protein interactions between IKBKB and FOXO3. PC-3 cells were stained with anti-IKBKB rabbit purified polyclonal antibody 1:100 and anti-FOXO3 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction complex, and nuclei were counterstained with DAPI (blue).



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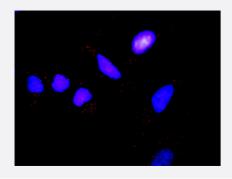
Representative image of Proximity Ligation Assay of protein-protein interactions between IKBKB and FOXO3. A-549 cells were stained with anti-IKBKB rabbit purified polyclonal antibody 1:100 and anti-FOXO3 mouse monoclonal antibody 1:50. Each red dot represents the detection of protein-protein interaction 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 IKBKB and FOXO3. PC-3 cells were stained with anti-IKBKB rabbit purified polyclonal antibody 1:100 and anti-FOXO3 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 IKBKB and FOXO3. HeLa cells were stained with anti-IKBKB rabbit purified polyclonal antibody 1:1200 and anti-FOXO3 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 IKBKB protein, and the other against the FOXO3 protein for use in <u>in situ Proximity Ligation Assay</u> . <u>See Publication Reference below</u> .
Reactivity	Human
Quality Control Testing	Protein protein interaction immunofluorescence result.  Representative image of Proximity Ligation Assay of protein-protein interactions between IKBKB and FOXO3. HeLa cells were stained with anti-IKBKB rabbit purified polyclonal antibody 1:1200 and an ti-FOXO3 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. IKBKB rabbit purified polyclonal antibody (100 ug)  2. FOXO3 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)

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Gene Info — FOXO3	
Entrez GenelD	2309
Gene Name	FOXO3
Gene Alias	AF6q21, DKFZp781A0677, FKHRL1, FKHRL1P2, FOXO2, FOXO3A, MGC12739, MGC31925
Gene Description	forkhead box O3
Omim ID	602681
Gene Ontology	<u>Hyperlink</u>
Gene Summary	This gene belongs to the forkhead family of transcription factors which are characterized by a distinct forkhead domain. This gene likely functions as a trigger for apoptosis through expression of genes necessary for cell death. Translocation of this gene with the MLL gene is associated with se condary acute leukemia. Alternatively spliced transcript variants encoding the same protein have been observed. [provided by RefSeq
Other Designations	OTTHUMP0000016944 forkhead box O3A forkhead homolog (rhabdomyosarcoma) like 1 forkhead, Drosophila, homolog of, in rhabdomyosarcoma-like 1



Gene Info — IKBKB	
Entrez GenelD	<u>3551</u>
Gene Name	IKBKB
Gene Alias	FLJ40509, IKK-beta, IKK2, IKKB, MGC131801, NFKBIKB
Gene Description	inhibitor of kappa light polypeptide gene enhancer in B-cells, kinase beta
Omim ID	<u>603258</u>
Gene Ontology	<u>Hyperlink</u>
Gene Summary	NFKB1 (MIM 164011) or NFKB2 (MIM 164012) is bound to REL (MIM 164910), RELA (MIM 164014), or RELB (MIM 604758) to form the NFKB complex. The NFKB complex is inhibited by I-kap pa-B proteins (NFKBIA, MIM 164008, or NFKBIB, MIM 604495), which inactivate NF-kappa-B by trapping it in the cytoplasm. Phosphorylation of serine residues on the I-kappa-B proteins by kinas es (IKBKA, MIM 600664, or IKBKB) marks them for destruction via the ubiquitination pathway, the reby allowing activation of the NF-kappa-B complex. Activated NFKB complex translocates into the nucleus and binds DNA at kappa-B-binding motifs such as 5-prime GGGRNNYYCC 3-prime or 5-prime HGGARNYYCC 3-prime (where H is A, C, or T; R is an A or G purine; and Y is a C or T p yrimidine).[supplied by OMIM
Other Designations	inhibitor of nuclear factor kappa B kinase beta subunit nuclear factor NF-kappa-B inhibitor kinase beta

# Pathway

- Acute myeloid leukemia
- Adipocytokine signaling pathway
- Apoptosis
- B cell receptor signaling pathway
- Chemokine signaling pathway
- Chemokine signaling pathway
- Chronic myeloid leukemia
- Endometrial cancer
- Epithelial cell signaling in Helicobacter pylori infection
- Insulin signaling pathway



- MAPK signaling pathway
- Neurotrophin signaling pathway
- Neurotrophin signaling pathway
- Non-small cell lung cancer
- Pancreatic cancer
- Pathways in cancer
- Prostate cancer
- Small cell lung cancer
- T cell receptor signaling pathway
- Toll-like receptor signaling pathway
- Type II diabetes mellitus

#### Disease

- Alzheimer disease
- Amenorrhea
- Arthritis
- Asthma
- Bronchiolitis
- Cardiovascular Diseases
- Cleft Lip
- Cleft Palate
- Cognition
- Colonic Neoplasms
- Diabetes Mellitus
- Disease Susceptibility
- Edema



- Genetic Predisposition to Disease
- Genetic Predisposition to Disease
- Hematologic Diseases
- Hepatitis C
- HIV Infections
- Hodgkin Disease
- Infant
- Infertility
- Inflammation
- Lymphoma
- Lymphoproliferative Disorders
- Multiple Myeloma
- Narcolepsy
- Obesity
- Occupational Diseases
- Ovarian Failure
- Primary Ovarian Insufficiency
- Rectal Neoplasms
- Respiratory Syncytial Virus Infections
- Thyroid Neoplasms
- Tobacco Use Disorder
- Tooth Abnormalities
- Waldenstrom Macroglobulinemia
- Werner syndrome