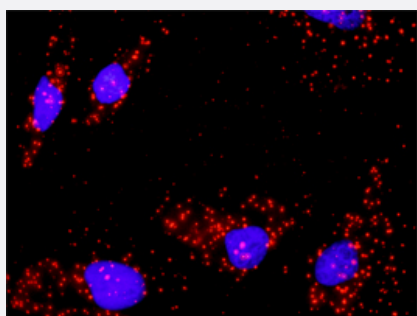


AKT1 & FOXO1 Protein Protein Interaction Antibody Pair

Catalog # DI0288

Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between AKT1 and FOXO1. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal antibody 1:1200 and anti-FOXO1 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 AKT1 protein, and the other against the FOXO1 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 AKT1 and FOXO1. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal antibody 1:1200 and anti-FOXO1 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. AKT1 rabbit purified polyclonal antibody (100 ug)
2. FOXO1 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 — AKT1

Entrez GeneID [207](#)

Gene Name AKT1

Gene Alias AKT, MGC99656, PKB, PKB-ALPHA, PRKBA, RAC, RAC-ALPHA

Gene Description v-akt murine thymoma viral oncogene homolog 1

Omim ID [164730 181500](#)

Gene Ontology [Hyperlink](#)

Gene Summary

The serine-threonine protein kinase encoded by the AKT1 gene is catalytically inactive in serum-starved primary and immortalized fibroblasts. AKT1 and the related AKT2 are activated by platelet-derived growth factor. The activation is rapid and specific, and it is abrogated by mutations in the pleckstrin homology domain of AKT1. It was shown that the activation occurs through phosphatidylinositol 3-kinase. In the developing nervous system AKT is a critical mediator of growth factor-induced neuronal survival. Survival factors can suppress apoptosis in a transcription-independent manner by activating the serine/threonine kinase AKT1, which then phosphorylates and inactivates components of the apoptotic machinery. Multiple alternatively spliced transcript variants have been found for this gene. [provided by RefSeq]

Other Designations

RAC-alpha serine/threonine-protein kinase|murine thymoma viral (v-akt) oncogene homolog-1|protein kinase B|rac protein kinase alpha

Gene Info — FOXO1

Entrez GeneID [2308](#)

Gene Name FOXO1

Gene Alias FKH1, FKHR, FOXO1A

Gene Description forkhead box O1

Omim ID [136533 268220](#)

Gene Ontology [Hyperlink](#)

Gene Summary

This gene belongs to the forkhead family of transcription factors which are characterized by a distinct forkhead domain. The specific function of this gene has not yet been determined; however, it may play a role in myogenic growth and differentiation. Translocation of this gene with PAX3 has been associated with alveolar rhabdomyosarcoma. [provided by RefSeq]

Other Designations

OTTHUMP00000018301|forkhead box O1A (rhabdomyosarcoma)|forkhead homolog in rhabdomyosarcoma|forkhead, Drosophila, homolog of, in rhabdomyosarcoma

Pathway

- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Apoptosis](#)
- [B cell receptor signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)
- [Glioma](#)
- [Insulin signaling pathway](#)
- [Insulin signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)
- [Neurotrophin signaling pathway](#)

- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Renal cell carcinoma](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)
- [Toll-like receptor signaling pathway](#)
- [VEGF signaling pathway](#)

Disease

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Amphetamine-Related Disorders](#)
- [Atherosclerosis](#)
- [Atherosclerosis](#)
- [Attention Deficit Disorder with Hyperactivity](#)
- [Autistic Disorder](#)
- [Basal Ganglia Diseases](#)
- [Bipolar Disorder](#)
- [Breast Neoplasms](#)
- [Calcinosis](#)
- [Calcinosis](#)

- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cognition](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Artery Disease](#)
- [Depressive Disorder](#)
- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Dominance](#)
- [Drug Toxicity](#)
- [Dyskinesia](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Glucose Intolerance](#)
- [Head and Neck Neoplasms](#)
- [HIV Infections](#)

- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)
- [Memory](#)
- [Metabolic Syndrome X](#)
- [NARP](#)
- [Necrosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neoplasms](#)
- [Neuropsychological Tests](#)
- [Obesity](#)
- [Obesity](#)
- [Osteoporosis](#)
- [Ovarian Failure](#)
- [Ovarian Neoplasms](#)
- [Parkinson disease](#)
- [Polycystic Ovary Syndrome](#)
- [Precursor T-Cell Lymphoblastic Leukemia-Lymphoma](#)
- [Prostatic Neoplasms](#)
- [Psychiatric Status Rating Scales](#)
- [Psychoses](#)
- [Psychotic Disorders](#)
- [Puberty](#)

- [Pulmonary Disease](#)
- [Rectal Neoplasms](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Schizophrenia](#)
- [Space Perception](#)
- [Thrombophilia](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Verbal Learning](#)
- [Werner syndrome](#)