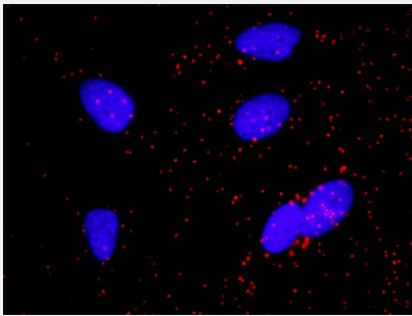


AKT1 & CHUK Protein Protein Interaction Antibody Pair

Catalog # DI0097 Size 1 Set

Applications



Representative image of Proximity Ligation Assay of protein-protein interactions between AKT1 and CHUK. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal antibody 1:1200 and anti-CHUK 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 CHUK 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 CHUK. HeLa cells were stained with anti-AKT1 rabbit purified polyclonal antibody 1:1200 and anti-CHUK 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. CHUK 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 — CHUK

Entrez GeneID	1147
Gene Name	CHUK
Gene Alias	IKBKA, IKK-alpha, IKK1, IKKA, NFKB1A, TCF16
Gene Description	conserved helix-loop-helix ubiquitous kinase
Omim ID	600664
Gene Ontology	Hyperlink

Gene Summary

This gene encodes a member of the serine/threonine protein kinase family. The encoded protein, a component of a cytokine-activated protein complex that is an inhibitor of the essential transcription factor NF-kappa-B complex, phosphorylates sites that trigger the degradation of the inhibitor via the ubiquitination pathway, thereby activating the transcription factor. [provided by RefSeq]

Other Designations

I-kappa-B kinase 1|I-kappa-B kinase-alpha|IKK-alpha kinase|I-kappa-B kinase alpha subunit|Nuclear factor NF-kappaB inhibitor kinase alpha|OTTHUMP00000020273|conserved helix-loop ubiquitous kinase

Pathway

- [Acute myeloid leukemia](#)
- [Acute myeloid leukemia](#)
- [Adipocytokine signaling pathway](#)
- [Adipocytokine signaling pathway](#)
- [Apoptosis](#)
- [Apoptosis](#)
- [B cell receptor signaling pathway](#)
- [B cell receptor signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chemokine signaling pathway](#)
- [Chronic myeloid leukemia](#)
- [Chronic myeloid leukemia](#)
- [Colorectal cancer](#)
- [Endometrial cancer](#)
- [Epithelial cell signaling in Helicobacter pylori infection](#)
- [ErbB signaling pathway](#)
- [Fc epsilon RI signaling pathway](#)
- [Fc gamma R-mediated phagocytosis](#)
- [Focal adhesion](#)

- [Glioma](#)
- [Insulin signaling pathway](#)
- [Jak-STAT signaling pathway](#)
- [MAPK signaling pathway](#)
- [MAPK signaling pathway](#)
- [Melanoma](#)
- [mTOR signaling pathway](#)
- [Neurotrophin signaling pathway](#)
- [Non-small cell lung cancer](#)
- [Pancreatic cancer](#)
- [Pancreatic cancer](#)
- [Pathways in cancer](#)
- [Pathways in cancer](#)
- [Prostate cancer](#)
- [Prostate cancer](#)
- [Renal cell carcinoma](#)
- [Small cell lung cancer](#)
- [Small cell lung cancer](#)
- [T cell receptor signaling pathway](#)
- [T cell receptor signaling pathway](#)
- [Tight junction](#)
- [Toll-like receptor signaling pathway](#)
- [Toll-like receptor signaling pathway](#)
- [VEGF signaling pathway](#)

- [Adenocarcinoma](#)
- [Alzheimer disease](#)
- [Alzheimer Disease](#)
- [Amphetamine-Related Disorders](#)
- [Arthritis](#)
- [Asthma](#)
- [Atherosclerosis](#)
- [Atherosclerosis](#)
- [Basal Ganglia Diseases](#)
- [Bipolar Disorder](#)
- [Breast Neoplasms](#)
- [Bronchiolitis](#)
- [Calcinosis](#)
- [Calcinosis](#)
- [Carcinoma](#)
- [Cardiovascular Diseases](#)
- [Cardiovascular Diseases](#)
- [Cerebral Hemorrhage](#)
- [Cleft Lip](#)
- [Cleft Palate](#)
- [Cognition](#)
- [Colonic Neoplasms](#)
- [Colorectal Neoplasms](#)
- [Coronary Artery Disease](#)
- [Coronary Artery Disease](#)
- [Depressive Disorder](#)

- [Diabetes Complications](#)
- [Diabetes Mellitus](#)
- [Diabetes Mellitus](#)
- [Disease Progression](#)
- [Disease Progression](#)
- [Disease Susceptibility](#)
- [Dominance](#)
- [Drug Toxicity](#)
- [Dyskinesia](#)
- [Edema](#)
- [Edema](#)
- [Endometrial Neoplasms](#)
- [Endometriosis](#)
- [Esophageal Neoplasms](#)
- [Fatty Liver](#)
- [Genetic Predisposition to Disease](#)
- [Genetic Predisposition to Disease](#)
- [Hematologic Diseases](#)
- [Hepatitis C](#)
- [HIV Infections](#)
- [HIV Infections](#)
- [Hodgkin Disease](#)
- [Hypertension](#)
- [Infant](#)
- [Intracranial Hemorrhages](#)
- [Kidney Failure](#)

- [Leukemia](#)
- [Liver Cirrhosis](#)
- [Lung Neoplasms](#)
- [Lymphoma](#)
- [Lymphoproliferative Disorders](#)
- [Memory](#)
- [Metabolic Syndrome X](#)
- [Multiple Myeloma](#)
- [Necrosis](#)
- [Neoplasm Metastasis](#)
- [Neoplasm Recurrence](#)
- [Neoplasms](#)
- [Neuropsychological Tests](#)
- [Obesity](#)
- [Occupational Diseases](#)
- [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](#)
- [Respiratory Syncytial Virus Infections](#)
- [Retinal Neoplasms](#)
- [Retinoblastoma](#)
- [Schizophrenia](#)
- [Space Perception](#)
- [Stroke](#)
- [Subarachnoid Hemorrhage](#)
- [Thrombophilia](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Tuberculosis](#)
- [Urinary Bladder Neoplasms](#)
- [Verbal Learning](#)
- [Waldenstrom Macroglobulinemia](#)
- [Werner syndrome](#)
- [Werner syndrome](#)