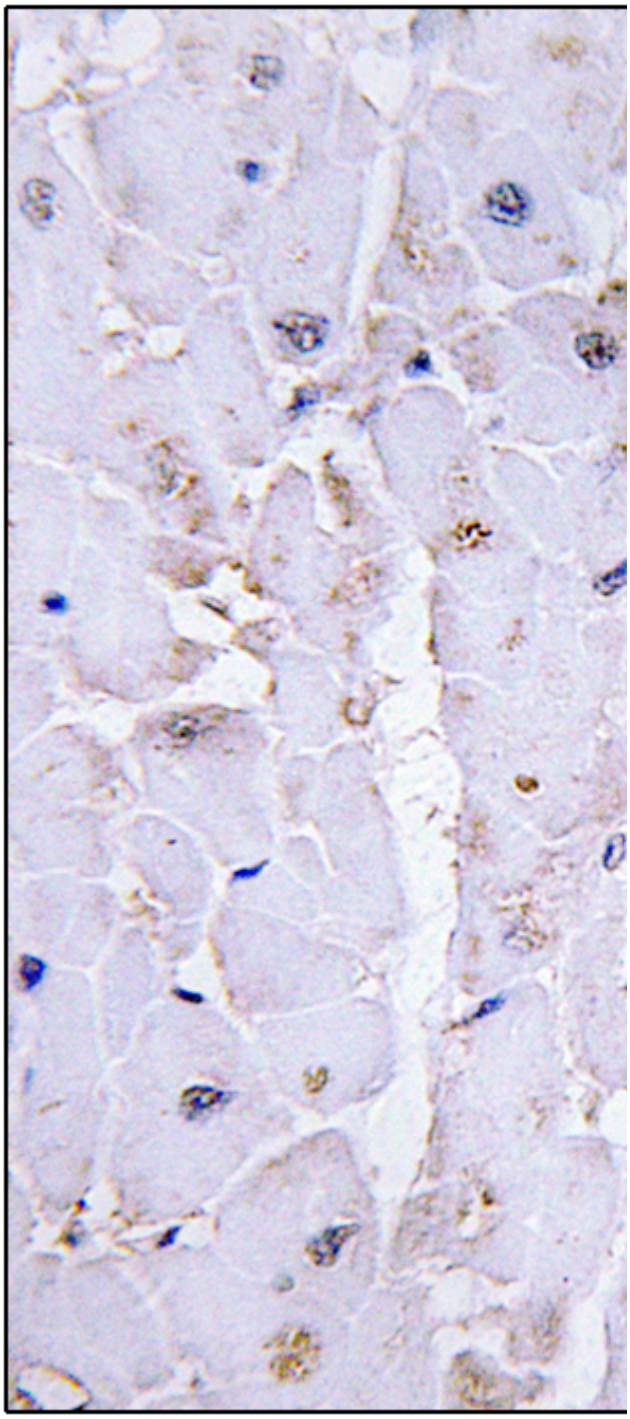
AKAP 13 Polyclonal Antibody

Catalog No	BYab-31743
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;IHC;IF;ELISA
Gene Name	AKAP13
Protein Name	A-kinase anchor protein 13
Immunogen	The antiserum was produced against synthesized peptide derived from human AKAP13. AA range:721-770
Specificity	AKAP 13 Polyclonal Antibody detects endogenous levels of AKAP 13 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB: 1/500 - 1/2000. IHC: 1/100 - 1/300. ELISA: 1/20000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AKAP13; BRX; HT31; LBC; A-kinase anchor protein 13; AKAP-13; AKAP-Lbc; Breast cancer nuclear receptor-binding auxiliary protein; Guanine nucleotide exchange factor Lbc; Human thyroid-anchoring protein 31; Lymphoid blast crisis oncogene; LBC
Observed Band	307kD
Cell Pathway	Cytoplasm, cytosol . Cytoplasm . Cytoplasm, cell cortex . Nucleus . Membrane ; Peripheral membrane protein . Colocalizes with the actin cytoskeleton at the cell cortex. .
Tissue Specificity	Detected in mammary gland (PubMed:9627117). Detected in heart (at protein level) (PubMed:11546812). Expressed as a 5.3 kb transcript in hematopoietic cells, skeletal muscle, lung, heart, estrogen-responsive reproductive tissues, including breast ductal epithelium. Also found in testis and breast cancer cell lines. Predominantly expressed as a 10 kb transcript in the heart and at lower levels in the lung, placenta, kidney, pancreas, skeletal muscle and liver. Transcripts of between 6-9 kb are also expressed in myeloid and lymphoid lineages, a variety of epithelial tissues, and in skeletal muscle.

Function	caution:The sequence shown here is derived from an Ensembl automatic analysis pipeline and should be considered as preliminary data.,domain:Both the DH and PH domains are required for transforming activity.,function:Anchors cAMP-dependent protein kinase (PKA) and acts as an adapter protein to selectively couple G alpha-13 and Rho. Augments gene activation by the estrogen receptor in an element-specific and ligand-dependent manner. Activates estrogen receptor beta by a p38 MAPK-dependent pathway. Isoform 6 stimulates exchange activity on Rho proteins in vitro, but not on CDC42, Ras or Rac and may bind calcium ions.,similarity:Contains 1 DH (DBL-homology) domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 phorbol-ester/DAG-type zinc finger.,subunit:Binds cAMP-dependent protein kinase (PKA) and to the RII-alpha regulatory subunit of PKA. Interacts with ESR1, ESR2, THRA, PPARA, R
Background	The A-kinase anchor proteins (AKAPs) are a group of structurally diverse proteins which have the common function of binding to the regulatory subunit of protein kinase A (PKA) and confining the holoenzyme to discrete locations within the cell. This gene encodes a member of the AKAP family. Alternative splicing of this gene results in multiple transcript variants encoding different isoforms containing c-terminal dbl oncogene homology (DH) and pleckstrin homology (PH) domains. The DH domain is associated with guanine nucleotide exchange activation for the Rho/Rac family of small GTP binding proteins, resulting in the conversion of the inactive GTPase to the active form capable of transducing signals. The PH domain has multiple functions. Therefore, these isoforms function as scaffolding proteins to coordinate a Rho signaling pathway, function as protein kinase A-anchoring proteins and, in addi
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemistry analysis of paraffin-embedded human heart tissue, using AKAP13 Antibody. The picture on the right is blocked with the synthesized peptide.

Western blot analysis of lysates from Jurkat and A549 cells, using AKAP13 Antibody. The lane on the right is blocked with the synthesized peptide.

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