



TOK-1 Polyclonal Antibody

Catalog No	YP-Ab-04247
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	BCCIP
Immunogen	Synthesized peptide derived from TOK-1 . at AA range: 60-140
Specificity	TOK-1 Polyclonal Antibody detects endogenous levels of TOK-1 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	Western Blot: 1/500 - 1/2000. ELISA: 1/5000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	TOK1;TOK 1;Protein TOK-1;Protein TOK 1;P21- and CDK-associated protein 1; TOK-1;BCCIP;BRCA2 and CDKN1A-interacting protein
Observed Band	35kD
Calculated Molecular Weight	35kD
Cell Pathway	Nucleus . Cytoplasm, cytoskeleton, microtubule organizing center, centrosome, centriole . Cytoplasm, cytoskeleton, spindle pole . Colocalizes with BRCA2 in discrete nuclear foci (PubMed:15713648). In interphase, preferential localizes to the mother centriole (PubMed:28394342). Recruited to the spindle pole matrix and centrosome by microtubules and dynein/dynactin activity (PubMed:28394342). .; [Isoform 1]: Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, spindle pole . Isoform 1/beta tends to be less abundant at, and less strongly associated with, centrosomes than isoform 2/alpha. .; [Isoform 2]: Cytoplasm, cytoskeleton, microtubule organizing center, centrosome . Cytoplasm, cytoskeleton, spindle pole . Isoform 2/alpha tends to be more abundant
Tissue Specificity	Expressed at high levels in testis and skeletal muscle and at lower levels in brain, heart, kidney, liver, lung, ovary, pancreas, placenta, and spleen.



Function

developmental stage: Isoform 1 is expressed throughout the cell cycle while isoform 2 is expressed following mitosis and peaks in the G1/S phase of the cell cycle.,function: May promote cell cycle arrest by enhancing the inhibition of CDK2 activity by CDKN1A. May be required for repair of DNA damage by homologous recombination in conjunction with BRCA2. May not be involved in non-homologous end joining (NHEJ).,miscellaneous: HT1080 cells that constitutively express low levels of BCCIP display increased levels of spontaneous single-stranded DNA and double-strand breaks.,similarity: Belongs to the BCP1 family.,subcellular location: Colocalizes with BRCA2 in discrete nuclear foci.,subunit: Interacts with BRCA2, CDKN1A and MTDH/LYRIC.,tissue specificity: Expressed at high levels in testis and skeletal muscle and at lower levels in brain, heart, kidney, liver, lung, ovary, pancreas, placenta, and sp

Background

This gene product was isolated on the basis of its interaction with BRCA2 and p21 proteins. It is an evolutionarily conserved nuclear protein with multiple interacting domains. The N-terminal half shares moderate homology with regions of calmodulin and M-calpain, suggesting that it may also bind calcium. Functional studies indicate that this protein may be an important cofactor for BRCA2 in tumor suppression, and a modulator of CDK2 kinase activity via p21. This protein has also been implicated in the regulation of BRCA2 and RAD51 nuclear focus formation, double-strand break-induced homologous recombination, and cell cycle progression. Multiple transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2008],

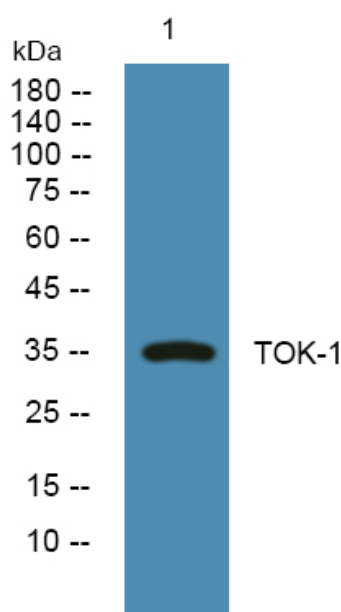
matters needing attention

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



Western blot analysis of lysates from KB cells, primary antibody was diluted at 1:1000, 4° over night