10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

SAKS1/2B28 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP57044

Product Information

Application	IHC-P, IHC-F, IF, ICC, E
Primary Accession	Q04323
Reactivity	Rat, Pig, Bovine
Host	Rabbit
Clonality	Polyclonal
Calculated MW	33325
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SAKS1/2B28
Epitope Specificity	51-150/297
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm
SIMILARITY	Belongs to the mitochondrial carrier (TC 2.A.29) family.
SUBUNIT	Component of a complex required to couple retrotranslocation, ubiquitination and deglycosylation composed of NGLY1, SAKS1, AMFR, VCP and RAD23B. Interacts with HOMER2 (By similarity). Interacts directly with VCP. Interacts with BRCA1 and BARD1; interaction takes place when BRCA1 is not autoubiquitinated but is strongly enhanced in the presence of autoubiquitinated BRCA1.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	2B28 is a component of a complex composed of NGLY1, SAKS1, AMFR, VCP and RAD23B, where it acts as an adapter that directs VCP to polyubiquitinated proteins. 2B28 also interacts with Homer 2, which further suggests role for 2B28 in the regulation of protein degradation by ubiquitin-proteasome systems.

Additional Information

Gene ID	51035
Other Names	UBX domain-containing protein 1, SAPK substrate protein 1, UBA/UBX 33.3 kDa protein, UBXN1, SAKS1
Dilution	IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When

reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

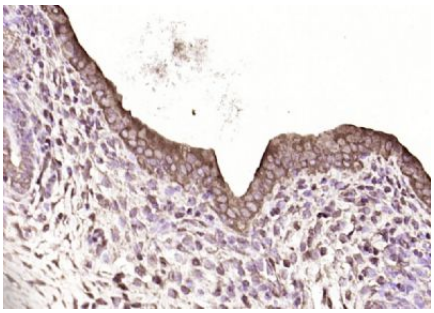
Name UBXN1

Synonyms SAKS1

Function Ubiquitin-binding protein that plays a role in the modulation of innate immune response. Blocks both the RIG-I-like receptors (RLR) and NF-kappa-B pathways. Following viral infection, UBXN1 is induced and recruited to the RLR component MAVS. In turn, interferes with MAVS oligomerization, and disrupts the MAVS/TRAF3/TRAF6 signalosome. This function probably serves as a brake to prevent excessive RLR signaling (PubMed:23545497). Interferes with the TNFalpha-triggered NF-kappa-B pathway by interacting with cellular inhibitors of apoptosis proteins (cIAPs) and thereby inhibiting their recruitment to TNFR1 (PubMed:25681446). Also prevents the activation of NF-kappa-B by associating with CUL1 and thus inhibiting NF-kappa-B inhibitor alpha/NFKBIA degradation that remains bound to NF-kappa-B (PubMed:28152074). Interacts with the BRCA1-BARD1 heterodimer and regulates its activity. Specifically binds 'Lys-6'-linked polyubiquitin chains. Interaction with autoubiquitinated BRCA1 leads to the inhibition of the E3 ubiquitin-protein ligase activity of the BRCA1- BARD1 heterodimer (PubMed:20351172). Component of a complex required to couple deglycosylation and proteasome-mediated degradation of misfolded proteins in the endoplasmic reticulum that are retrotranslocated in the cytosol.

Cellular Location Cytoplasm.

Images



Paraformaldehyde-fixed, paraffin embedded (rat uterus); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SAKS1 2B28) Polyclonal Antibody, Unconjugated (AP57044) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.