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Prosapip2 Antibody

Catalog # ASC10980

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	A7MCY6
Other Accession	NP_055541, 7662302
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	67702
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Prosapip2 antibody can be used for detection of Prosapip2 by Western blot at 1 μg/mL. Antibody can also be used for immunohistochemistry starting at 5 μg/mL. For immunofluorescence start at 20 μg/mL.

Additional Information

Gene ID	9755
Other Names	TANK-binding kinase 1-binding protein 1, TBK1-binding protein 1, TBKBP1 {ECO:0000312|EMBL:AAI11419.1}
Target/Specificity	TBKBP1;
Reconstitution & Storage	Prosapip2 antibody can be stored at 4℃ for three months and -20℃, stable for up to one year. As with all antibodies care should be taken to avoid repeated freeze thaw cycles. Antibodies should not be exposed to prolonged high temperatures.
Precautions	Prosapip2 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	TBKBP1 {ECO:0000312|EMBL:AAI11419.1}
Function	Adapter protein which constitutively binds TBK1 and IKBKE playing a role in antiviral innate immunity.
Tissue Location	Detected in leukocytes, lung, placenta, small intestine, liver, kidney, spleen, muscle, heart, brain and at low levels in thymus.

Background

Prosapip2 Antibody: Prosapip2 (TBKBP1) is essential for signal transduction during viral infection thus plays a major role in the TNF/NF-κB pathway. It is an adaptor protein that constitutively binds TBK1 (TANK-binding kinase) and IKBKE and may play a role in antiviral innate immunity. Prosapip2 is a 615 amino acid adaptor protein belonging to the fibrillar collagen family, consisting of trimers of identical alpha 1 chains which are linked to each other by interchain disulfide bonds. It has a ubiquitous expression with highest levels in ovary, followed by the neuronal system. Prosapip2 binds to TBK1 and helps in the activation of IRF3 which controls the expression of antiviral genes during infection. Recent studies show that Prosapip2 is an interaction partner of ProSAP2/Shank3 and actin, suggesting a role as a linker molecule between postsynaptic density and the cytoskeleton.

References

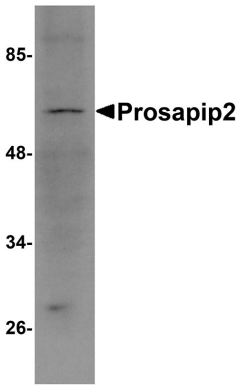
Bouwmeester T, Bauch A, Ruffner H, et al. A physical and functional map of the human TNF-alpha/NF-kappa B signal transduction pathway. Nat. Cell Biol.2004; 6:97-105

Ryzhakov G and Randow F. SINTBAD, a novel component of innate antiviral immunity, shares a TBK1-binding domain with NAP1 and TANK. EMBO J.2007; 26:3180-90.

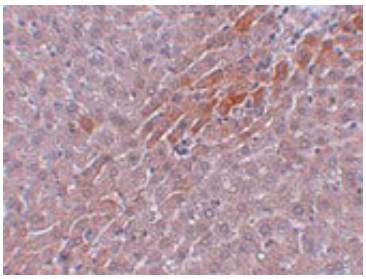
Meffert MK, Chang JM, Wiltgen BJ, et al. NF-kappa B functions in synaptic signaling and behavior. Nat. Neurosci.2003; 6:1072-78.

Liebau S, Proepper C, Schmidt T, et al. ProSAPiP2, a novel postsynaptic density protein that interacts with ProSAP2/Shank3. Biochem. Biophys. Res Commun.2009; 385:460-5.

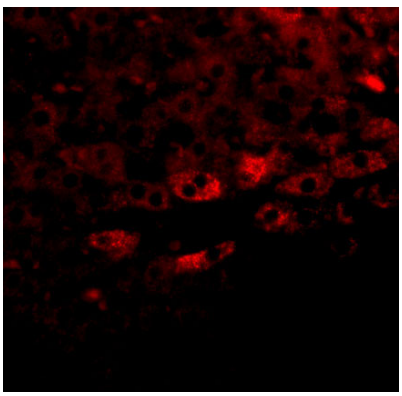
Images



Western blot analysis of Prosapip2 in rat liver tissue lysate with Prosapip2 antibody at 1 µg/mL.



Immunohistochemistry of Prosapip2 in rat liver tissue with Prosapip2 antibody at 5 µg/mL.



Immunofluorescence of Prosapip 2 in rat liver tissue with Prosapip 2 antibody at 20 µg/mL.

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