

Prosapip2 Antibody

Catalog # ASC10980

Specification

Prosapip2 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Application Notes WB, IHC-P, IF, E <u>A7MCY6</u> NP_055541, 7662302 Human, Mouse, Rat Rabbit Polyclonal IgG 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.

Prosapip2 Antibody - Additional Information

Gene ID Target/Specificity TBKBP1;

9755

Reconstitution & Storage

Prosapip2 antibody can be stored at 4°C for three months and -20°C, 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.

Prosapip2 Antibody - 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.

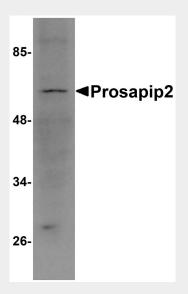
Prosapip2 Antibody - Protocols



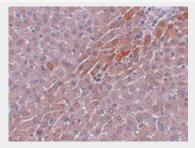
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Prosapip2 Antibody - Images

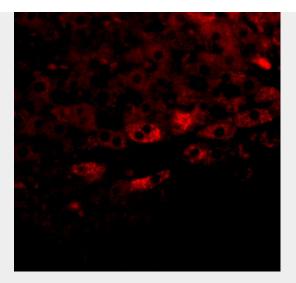


Western blot analysis of Prosapip2 in rat liver tissue lysate with Prosapip2 antibody at 1 µg/mL.



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.

Prosapip2 Antibody - 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.

Prosapip2 Antibody - 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.