

IPR1 Antibody
Catalog # ASC10617**Specification**

IPR1 Antibody - Product Information

Application	WB, IHC, IF
Primary Accession	Q9HB58
Other Accession	NP_004501 , 190343008
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Application Notes	Ipr1 antibody can be used for detection of Ipr1 by Western blot at 0.5 - 2 µg/mL. Antibody can also be used for immunohistochemistry starting at 2.5 µg/mL. For immunofluorescence start at 20 µg/mL.

IPR1 Antibody - Additional Information

Gene ID	3431
Target/Specificity	
SP110;	

Reconstitution & Storage

IPR1 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

IPR1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

IPR1 Antibody - Protein Information

Name SP110

Function

Transcription factor. May be a nuclear hormone receptor coactivator. Enhances transcription of genes with retinoic acid response elements (RARE).

Cellular Location

Nucleus {ECO:0000255|PROSITE-ProRule:PRU00185, ECO:0000255|PROSITE-ProRule:PRU00747, ECO:0000269|PubMed:10913195, ECO:0000269|PubMed:25593309}. Note=Found in the nuclear body

Tissue Location

Highly expressed in peripheral blood leukocytes and spleen. Detected at intermediate levels in

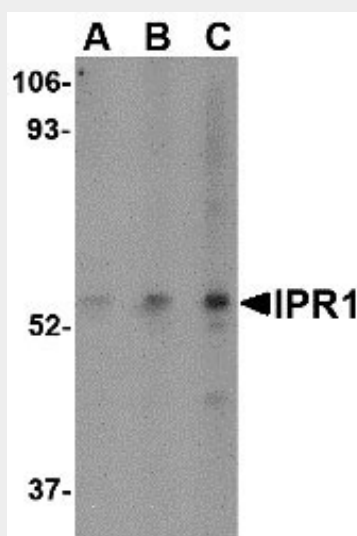
thymus, prostate, testis, ovary, small intestine and colon, and at low levels in heart, brain, placenta, lung, liver, skeletal muscle, kidney and pancreas

IPR1 Antibody - Protocols

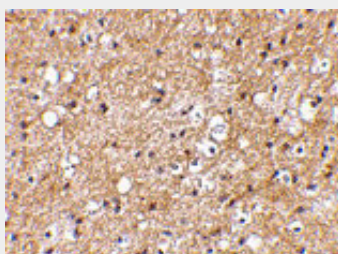
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

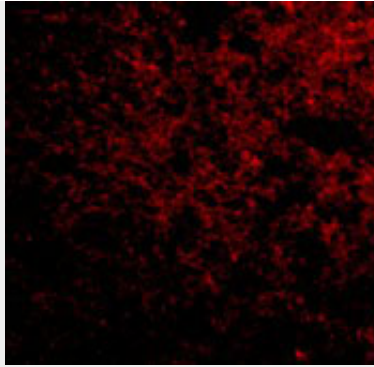
IPR1 Antibody - Images



Western blot analysis of IPR1 in HeLa cell lysate with IPR1 antibody at (A) 0.5, (B) 1, and (C) 2 $\mu\text{g/mL}$.



Immunohistochemical staining of human brain tissue using IPR1 antibody at 2.5 $\mu\text{g/mL}$.



Immunofluorescence of IPR1 in Human Brain cells with IPR1 antibody at 50 µg/mL.

IPR1 Antibody - Background

IPR1 Antibody: Susceptibility to tuberculosis (TB) in mice has recently been attributed to the IPR1 gene. IPR1 is a member of the SP100/SP140 family of nuclear body proteins and encodes a leukocyte-specific nuclear body component. The protein can function as an activator of gene transcription and may serve as a nuclear hormone receptor coactivator. Alternative splicing has been observed for this gene and three transcript variants, encoding distinct isoforms, have been identified. SP110 is the closest homolog of the IPR1 protein in humans. The IPR1/Sp110 gene product might play a role in integrating signals generated by intracellular pathogens with mechanisms controlling innate immunity, cell death, and pathogenesis. IPR1/Sp110 is up-regulated after infection with *M. tuberculosis* and required by *Anaplasma phagocytophilum* for infection of human promyelocytic cells. Defects in Sp110 are a cause of severely impaired resistance to infection by *M. tuberculosis*.

IPR1 Antibody - References

- Pan H, Yan BS, Rojas M, et al. Ipr1 gene mediates innate immunity to tuberculosis. *Nature* 2005; 434:767-72.
- Bloch DB, Nakajima A, Gulick T, et al. Sp110 localizes to the PML-Sp100 nuclear body and may function as a nuclear hormone receptor transcriptional coactivator. *Mol. Cell Biol.* 2000; 20:6138-46.
- De la Fuente J, Manzano-Roman R, Blouin EF, et al. Sp110 transcription is induced and required by *Anaplasma phagocytophilum* for infection of human promyelocytic cells. *BMC Infect. Dis.* 2007; 7:110.
- Tosh K, Campbell SJ, Fielding K, et al. Variants in the SP110 gene are associated with genetic susceptibility to tuberculosis in West Africa. *Proc. Natl. Acad. Sci.* 2006; 103:10364-8.