

IPR1 Antibody

Catalog # ASC10617

Product Information

Application	WB, IF, E, IHC-P
Primary Accession	Q9HB58
Other Accession	NP_004501 , 190343008
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Calculated MW	78396
Concentration (mg/ml)	1 mg/mL
Conjugate	Unconjugated
Application Notes	Ipr1 antibody can be used for detection of Ipr1 by Western blot at 0.5 - 2 μ g/mL. Antibody can also be used for immunohistochemistry starting at 2.5 μ g/mL. For immunofluorescence start at 20 μ g/mL.

Additional Information

Gene ID	3431
Other Names	Sp110 nuclear body protein, Interferon-induced protein 41/75, Speckled 110 kDa, Transcriptional coactivator Sp110, SP110
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.

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

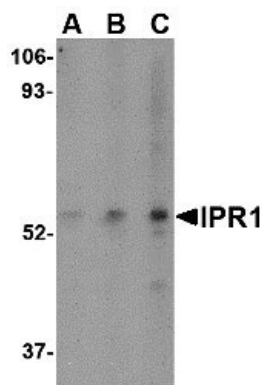
Background

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*.

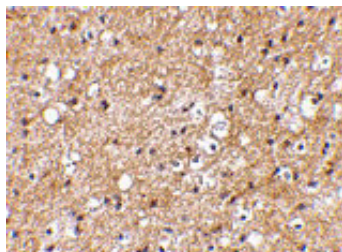
References

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.

Images

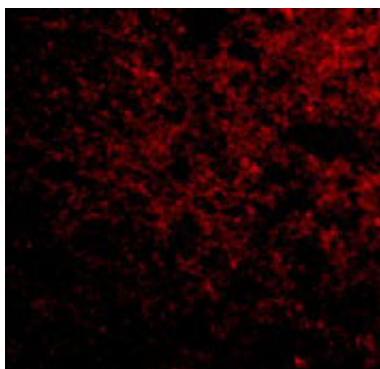


Western blot analysis of IPR1 in HeLa cell lysate with IPR1 antibody at (A) 0.5, (B) 1, and (C) 2 µg/mL.



Immunohistochemical staining of human brain tissue using IPR1 antibody at 2.5 µg/mL.

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



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