

IPR1 (CT) antibody (pAb)

Rabbit Anti-Human/Mouse/Rat IPR1 (CT)

Instruction Manual

Catalog Number	PK-AB718-4407
Synonyms	IPR1 Antibody; Sp110 nuclear body protein, Intracellular pathogen resistance protein 1
Description	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 <i>M. tuberculosis</i> and required by <i>Anaplasma phagocytophilum</i> for infection of human promyelocytic cells. Defects in Sp110 are a cause of severely impaired resistance to infection by <i>M. tuberculosis</i> .
Quantity	100 µg
Source / Host	Rabbit
Immunogen	IPR1 antibody was raised in rabbits against a 15 amino acid peptide near the carboxy terminus of the human IPR1.
Purification Method	Affinity chromatography purified via peptide column.
Clone / IgG Subtype	Polyclonal antibody
Species Reactivity	Human, Mouse, Rat
Specificity	
Formulation	Antibody is supplied in PBS containing 0.02% sodium azide.
Reconstitution	During shipment, small volumes of antibody will occasionally become entrapped in the seal of the product vial. For products with volumes of 200 µl or less, we recommend gently tapping the vial on a hard surface or briefly centrifuging the vial in a tabletop centrifuge to dislodge any liquid in the container's cap.
Storage & Stability	Antibody can be stored at 4°C for three months and at -20°C 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.
Applications	E, WB, IHC, IF INote: Antibody might be suitable for other applications not tested so far. Optimal concentrations for each application have to be determined individually. 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.
Images	Available upon request.
References	Pan H, Yan BS, Rojas M, et al. Ipr1 gene mediates innate immunity to tuberculosis. <i>Nature</i> 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. <i>Mol. Cell Biol.</i> 2000; 20:6138-46. De la Fuente J, Manzano-Roman R, Blouin EF, et al. Sp110 transcription is induced and required by <i>Anaplasma phagocytophilum</i> for infection of human promyelocytic cells. <i>BMC Infect. Dis.</i> 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. <i>Proc. Natl. Acad. Sci.</i> 2006; 103:10364-8.
Images	Available upon request.
Related Products	Cat.No. PK-AB718-4407P; IPR1 Peptide Cat.No. PK-AB718-1201; HeLa Cell Lysate

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