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IFNGR1 (pY457) Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51647

Product Information

Application	WB
Primary Accession	P15260
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	54405

Additional Information

Gene ID	3459
Other Names	Interferon gamma receptor 1, IFN-gamma receptor 1, IFN-gamma-R1, CDw119, CD119, IFNGR1
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human IFNGR1. The exact sequence is proprietary.
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	IFNGR1 (HGNC:5439)
Function	Receptor subunit for interferon gamma/INFG that plays crucial roles in antimicrobial, antiviral, and antitumor responses by activating effector immune cells and enhancing antigen presentation (PubMed:20015550). Associates with transmembrane accessory factor IFNGR2 to form a functional receptor (PubMed:10986460, PubMed:2971451, PubMed:7615558, PubMed:7617032, PubMed:7673114). Upon ligand binding, the intracellular domain of IFNGR1 opens out to allow association of downstream signaling components JAK1 and JAK2. In turn, activated JAK1 phosphorylates IFNGR1 to form a docking site for STAT1. Subsequent phosphorylation of STAT1 leads to dimerization, translocation to the nucleus, and stimulation of target gene transcription (PubMed:28883123). STAT3 can also be activated in a similar manner although activation seems weaker. IFNGR1 intracellular domain phosphorylation also provides a docking site for SOCS1 that regulates the JAK-STAT pathway by competing with STAT1 binding to IFNGR1 (By similarity).

Cellular Location Cell membrane; Single-pass type I membrane protein

Background

Receptor for interferon gamma. Two receptors bind one interferon gamma dimer.

References

Aguet M.,et al.Cell 55:273-280(1988).
Kalnine N.,et al.Submitted (MAY-2003) to the EMBL/GenBank/DDBJ databases.
Mungall A.J.,et al.Nature 425:805-811(2003).
Mural R.J.,et al.Submitted (SEP-2005) to the EMBL/GenBank/DDBJ databases.
Stueber D.,et al.Biochemistry 32:2423-2430(1993).