

IFNGR1 (pY457) Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP51647

Product Information

Application WB Primary Accession P15260

Reactivity Human, Mouse, Rat

HostRabbitClonalityPolyclonalCalculated MW54405

Additional Information

Gene ID 3459

Other Names Interferon gamma receptor 1, IFN-gamma receptor 1, IFN-gamma-R1,

CDw119, CD119, IFNGR1

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).

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