

KD-Validated Anti-IFNGR1 Rabbit Monoclonal Antibody Rabbit monoclonal antibody Catalog # AGI2104

Specification

KD-Validated Anti-IFNGR1 Rabbit Monoclonal Antibody - Product Information

Application Primary Accession Reactivity Clonality Isotype Calculated MW	WB, FC, ICC <u>P15260</u> Rat, Human, Mouse Monoclonal Rabbit IgG Predicted, 54 kDa, observed, 50-100 kDa KDa
Gene Name Aliases	IFNGR1 IFNGR1; Interferon Gamma Receptor 1; CD119; IFN-Gamma Receptor 1; IFN-Gamma-R-Alpha; CD119 Antigen; IFN-Gamma-R1; CDw119; IFNGR; Interferon-Gamma Receptor Alpha Chain; Interferon Gamma Receptor Alpha-Chain; Immune Interferon Receptor 1; Antiviral Protein, Type 2; AVP, Type 2; IMD27A; IMD27B
Immunogen	A synthesized peptide derived from human IFNGR1

KD-Validated Anti-IFNGR1 Rabbit Monoclonal Antibody - Additional Information

Gene ID 3459 Other Names Interferon gamma receptor 1 {ECO:000312|HGNC:HGNC:5439}, IFN-gamma receptor 1, IFN-gamma-R1, CDw119, Interferon gamma receptor alpha-chain, IFN-gamma-R-alpha, CD119, IFNGR1 (HGNC:5439)

KD-Validated Anti-IFNGR1 Rabbit Monoclonal Antibody - 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:2971451, PubMed:7615558, PubMed:7615558, PubMed:7617032, 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

KD-Validated Anti-IFNGR1 Rabbit Monoclonal Antibody - Protocols

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

KD-Validated Anti-IFNGR1 Rabbit Monoclonal Antibody - Images



Western blotting analysis using anti-interferon gamma receptor 1 antibody (Cat#AGI2104). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-interferon gamma receptor 1 antibody (Cat#AGI2104, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.





Western blotting analysis using anti-interferon gamma receptor 1 antibody (Cat#AGI2104). Interferon gamma receptor 1 expression in wild-type (WT) and interferon gamma receptor 1 (IFNGR1) shRNA knockdown (KD) 293T cells with 20 μ g of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-interferon gamma receptor 1 antibody (Cat#AGI2104, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of HNRNPA1L2 expression in HepG2 cells using anti-HNRNPA1L2 antibody (Cat# 64897, 1:1,000). Green, isotype control; red, HNRNPA1L2.



Immunocytochemical staining of C2C12 cells with anti-Interferon gamma receptor 1 antibody (Cat#AGI2104, 1:1,000). Nuclei were stained blue with DAPI; Interferon gamma receptor 1 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar, 20 µm.