

10-4121: Monoclonal Antibody to RIG-I (Clone: ABM4H29)

Clonality :	Monoclonal
Clone Name :	ABM4H29
Application :	IHC,FACS,WB
Reactivity :	Human
Gene :	DDX58
Gene ID :	23586
Uniprot ID :	O95786
Format :	Purified
Alternative Name :	DDX58
Isotype :	Mouse IgG1 Kappa
Immunogen Information :	A partial length recombinant human RIG-I protein (amino acids 1-220) was used as the immunogen for this antibody.

Description

RIG-I (retinoic-acid-inducible gene I), also known as DDX58 (DEAD (Asp-Glu-Ala-Asp) box polypeptide 58) is a 925-residue cytoplasmic viral RNA receptor, critically involved in the activation of the innate immune response to RNA virus infection. It is a member of the RIG-I-like receptor (RLR) family and is an essential intracellular sensor for several 5'-triphosphorylated RNA viruses. RIG-I elicits its antiviral interferon (IFN) responses by recognizing viral double-stranded RNAs (dsRNAs). Structurally it comprises a helicase domain, a C-terminal domain, and N-terminal CARDs (caspase activation recruitment domains) involved in activating MAVS (mitochondrial antiviral signaling protein). Upon binding of 5'-triphosphorylated RNA, RIG-I undergoes conformational changes and post-translational modifications that allow multimerization and interaction with the mitochondrial antiviral signaling protein (MAVS).

Product Info

Amount :	25 µg / 100 µg
Purification :	Protein G Chromatography
Content :	25 µg in 50 µl/100 µg in 200 µl PBS containing 0.05% BSA and 0.05% sodium azide. Sodium azide is highly toxic.
Storage condition :	Store the antibody at 4°C, stable for 6 months. For long-term storage, store at -20°C. Avoid repeated freeze and thaw cycles.

Application Note

Western blot analysis: 2-4 µg/ml, Immunohistochemical analysis: 15 µg/ml, Flowcytometric analysis: 0.5-1µg/10⁶ cells

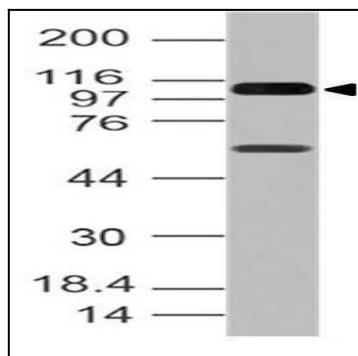


Fig-1: Western blot analysis of RIG1/DDx58. Anti-RIG1/DDx58 antibody (Clone: ABM4H29) was tested at 2 $\mu\text{g/ml}$ on human kidney lysate.

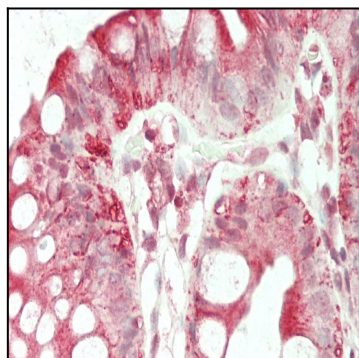


Fig-2: Immunohistochemical analysis of RIG1/DDx58 in human Colon Tissue using RIG1/DDx58 antibody (Clone: ABM4H29) at 15 $\mu\text{g/ml}$.

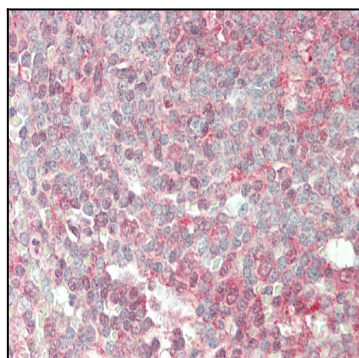


Fig-3: Immunohistochemical analysis of RIG1/DDx58 in human Spleen Tissue using RIG1/DDx58 antibody (Clone: ABM4H29) at 15 $\mu\text{g/ml}$.

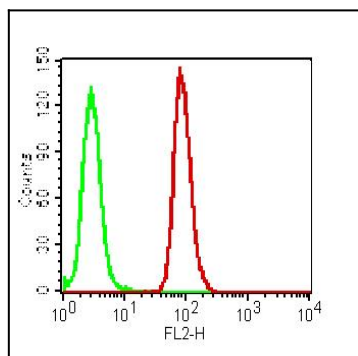


Figure-4: Intracellular flow cytometric analysis of RIG-I in K562 Cell line using 0.5 $\mu\text{g}/10^6$ cells of Anti-RIG I antibody (ABM4H29). Green represent isotype control and red represent Anti-RIG I antibody (10-4121 Abeomics). Goat anti-mouse PE conjugate was used as secondary.