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

Clone Name: Monoclonal
Clone Name: ABM4H29
Application: IHC,FACS,WB

Reactivity: Human
Gene: DDX58
Gene ID: 23586
Uniprot ID: 095786
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 :**  $25 \mu g / 100 \mu g$ 

**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  $\mu$ g/ml, Immunohistochemical analysis: 15  $\mu$ g/ml, Flowcytometric analysis: 0.5-1 $\mu$ g/10^6 cells



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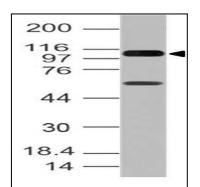


Fig-1: Western blot analysis of RIG1/DDx58. Anti-RIG1/DDx58 antibody (Clone: ABM4H29) was tested at 2  $\mu$ g/ml on human kidney lysate.

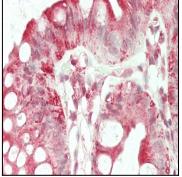


Fig-2: Immunohistochemical analysis of RIG1/DDx58 in human Colon Tissue using RIG1/DDx58 antibody (Clone: ABM4H29) at 15  $\mu$ g/ml.

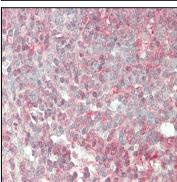


Fig-3: Immunohistochemical analysis of RIG1/DDx58 in human Spleen Tissue using RIG1/DDx58 antibody (Clone: ABM4H29) at 15 µg/ml.

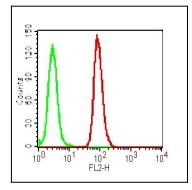


Figure-4: Intracellular flow cytometric analysis of RIG-I in K562 Cell line using 0.5  $\mu$ g/10^6 cells of Anti-RIGI antibody (ABM4H29). Green represent isotype control and red represent Anti-RIG I antibody (10-4121 Abeomics). Goat anti-mouse PE conjugate was used as secondary.