

10-4102: Monoclonal Antibody to RIG-I (Clone: ABM40B5)

Clonality :	Monoclonal
Clone Name :	ABM40B5
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 or Probable ATP-dependent RNA helicase DDX58 or simply DDX58 is a RNA helicase enzyme with two isoforms (106 and 101 kDa). RIG-I belongs to the DEAD/H box family and is involved in several cellular responses including RNA binding and alteration of RNA secondary structure. RIG-1 acts as sensor of viral nucleic acids thus activating a cascade of antiviral responses including the induction of type I interferons and pro-inflammatory cytokines. Generally it remains as a monomer but upon activation by viral dsRNA it homomultimerizes and interacts with mitochondria antiviral signaling protein (MAVS/IPS1) which activating a cascade of reactions to produce specific interferon. RIG-1 is mostly expressed in vascular smooth cells.

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: 5 µg/ml, Flowcytometric analysis: 0.5-1µg/10⁶ cells

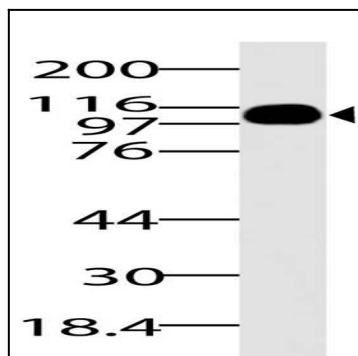


Fig-1: Western blot analysis of RIG-I. Anti- RIG-I antibody (Clone: ABM40B5) was used at 2 $\mu\text{g/ml}$ on K562 lysates.

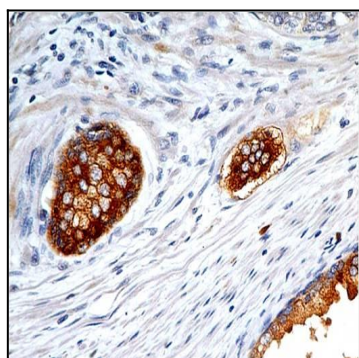


Fig-2 : Immunohistochemical analysis of RIG-I in human prostate tissue using RIG-I antibody (Clone: ABM40B5) at 5 $\mu\text{g/ml}$.

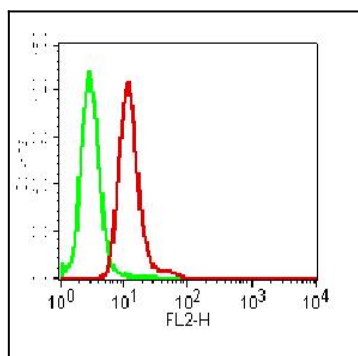


Figure-3: Intracellular flow cytometric analysis of RIG-I in K562 Cell line using 0.5 $\mu\text{g}/10^6$ cells of Anti-RIG I antibody (ABM40B5). Green represent isotype control and red represent Anti-RIG I antibody (10-4102 Abeomics). Goat anti-mouse PE conjugate was used as secondary.