



Rabbit Anti-Human RIG-I monoclonal antibody, clone 46I3M59 (CABT-L1266)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Specificity	This antibody is predicted to react with mouse based on sequence homology.
Target	DDX58
Immunogen	A recombinant protein corresponding to amino acids 454-600 of O95786.
Isotype	IgG
Source/Host	Rabbit
Species Reactivity	Human
Clone	46I3M59
Purification	Protein A Purified
Conjugate	Unconjugated
Applications	IHC-P, WB
Format	Liquid
Concentration	0.5 mg/ml
Buffer	PBS
Preservative	0.09% Sodium Azide
Storage	Maintain refrigerated at 2-8°C for up to 1 month. For long term storage store at -20°C

BACKGROUND

Introduction

Retinoic acid-inducible gene I, RIG-I is a pattern recognition receptor (PRR) involved in the recognition of viral dsRNA. Along with MDA5, RIG-I detects viral dsRNA and activates the innate immune response. Both MDA5 and RIG-I are RNA helicases and they perform overlapping as well as distinct roles. RIG-I is activated by dsRNAs without a 5'-triphosphate end and short dsRNAs, whereas MDA5 is activated by long dsRNAs. Once activated, both proteins signal through IPS-1 activating transcription factors NF-kappaB and IRF-3 and ultimately activating apoptosis, cytokine signaling, and inflammation. RIG-I is essential for signaling by influenza A, influenza B, human respiratory syncytial virus, paromyxoviruses, Japanese encephalitis virus, and West Nile virus. MicroRNA-146a has been implicated in feedback inhibition of RIG-I-dependant antiviral response by negatively regulating RIG-I targets TRAF6, IRAK1, and IRAK2. Recent evidence has implicated RIG-I in the detection of cytosolic DNA through RNA polymerase III activity.

Keywords

DDX58;DEAD (Asp-Glu-Ala-Asp) box polypeptide 58;RIGI;RIG-I;RLR-1;probable ATP-dependent RNA helicase DDX58;RNA helicase RIG-I;DEAD box protein 58;retinoic acid-inducible gene 1 protein;retinoic acid-inducible gene I protein;DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide
