



# 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

<b>Specificity</b>	This antibody is predicted to react with mouse based on sequence homology.
<b>Target</b>	DDX58
<b>Immunogen</b>	A recombinant protein corresponding to amino acids 454-600 of O95786.
<b>Isotype</b>	IgG
<b>Source/Host</b>	Rabbit
<b>Species Reactivity</b>	Human
<b>Clone</b>	46I3M59
<b>Purification</b>	Protein A Purified
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	IHC-P, WB
<b>Format</b>	Liquid
<b>Concentration</b>	0.5 mg/ml
<b>Buffer</b>	PBS
<b>Preservative</b>	0.09% Sodium Azide
<b>Storage</b>	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