

Product datasheet for **TA322385**

DDX58 Rabbit Polyclonal Antibody

Product data:

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|-------------------------|---|
| Product Type: | Primary Antibodies |
| Applications: | WB |
| Recommended Dilution: | WB: 1:500-2000 |
| Reactivity: | Human, Mouse, Rat |
| Host: | Rabbit |
| Isotype: | IgG |
| Clonality: | Polyclonal |
| Immunogen: | Synthetic peptide corresponding to a region derived from 909-925 amino acids of human DEAD (Asp-Glu-Ala-Asp) box polypeptide 58 |
| Formulation: | PBS pH7.3, 0.05% NaN ₃ , 50% glycerol |
| Concentration: | lot specific |
| Purification: | Antigen affinity purification |
| Conjugation: | Unconjugated |
| Storage: | Store at -20°C as received. |
| Stability: | Stable for 12 months from date of receipt. |
| Predicted Protein Size: | 107 kDa |
| Gene Name: | DEXD/H-box helicase 58 |
| Database Link: | NP_055129 Entrez Gene 230073 MouseEntrez Gene 297989 RatEntrez Gene 23586 Human O95786 |



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Background:

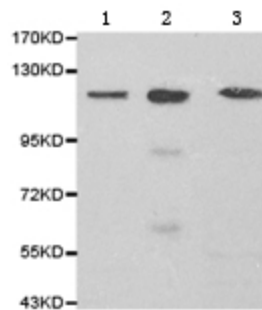
Antiviral innate immunity depends on the combination of parallel pathways triggered by virus detecting proteins in the Toll-like receptor (TLR) family and RNA helicases, such as Rig-I (retinoic acid-inducible gene I) and MDA-5 (melanoma differentiation-associated antigen 5), which promote the transcription of type I interferons (IFN) and antiviral enzymes. TLRs and helicase proteins contain sites that recognize the molecular patterns of different virus types, including DNA, single-stranded RNA (ssRNA), double-stranded RNA (dsRNA), and glycoproteins. These antiviral proteins are found in different cell compartments; TLRs (i.e. TLR3, TLR7, TLR8, and TLR9) are expressed on endosomal membranes and helicases are localized to the cytoplasm. Rig-I expression is induced by retinoic acid, LPS, IFN, and viral infection. Both Rig-I and MDA-5 share a DExD/H-box helicase domain that detects viral dsRNA and two amino-terminal caspase recruitment domains (CARD) that are required for triggering downstream signaling. Rig-I binds both dsRNA and viral ssRNA that contains a 5'-triphosphate end not seen in host RNA. Though structurally related, Rig-I and MDA-5 detect a distinct set of viruses. The CARD domain of the helicases, which is sufficient to generate signaling and IFN production, is recruited to the CARD domain of the MAVS/VISA/Cardif/IPS-1 mitochondrial protein, which triggers activation of NF- κ B, TBK1/IKKe, and IRF-3/IRF-7.

Synonyms:

RIG-I; RIGI; RLR-1

Protein Pathways:

Cytosolic DNA-sensing pathway, RIG-I-like receptor signaling pathway

Product images:

Predicted band size: 107 kDa. Positive control: Jurkat, HepG2 and MCF7 cell lysate.
Recommended dilution: 1/500-2000. (Gel: 8%SDS-PAGE Lane 1: Jurkat cell lysate Lane 2: HepG2 cell lysate Lane 3: MCF7 cell lysate
Lysates: 40 ug per lane Primary antibody: 1/500 dilution Secondary antibody: Goat anti Rabbit IgG - H&L (HRP) at 1/10000 dilution Exposure time: 1 minute)