10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

KD-Validated Anti-DDX50 Mouse Monoclonal Antibody

Mouse monoclonal antibody
Catalog # AGI2047

Specification

KD-Validated Anti-DDX50 Mouse Monoclonal Antibody - Product Information

Application	**WB, ICC**
Primary Accession	Q9BQ39
Reactivity	**Rat, Human, Mouse**
Clonality	**Monoclonal**
Isotype	**Mouse IgG2b**
Calculated MW	**Predicted, 83 kDa, observed, 83 kDa KDa**
Gene Name	**DDX50**
Aliases	**DDX50; DExD-Box Helicase 50; RH-II/GuB; GU2; GUB; DEAD (Asp-Glu-Ala-Asp) Box Polypeptide 50; ATP-Dependent RNA Helicase DDX50; DEAD-Box Helicase 50; DEAD Box Protein 50; MGC3199; Gu-Beta; Malignant Cell Derived RNA Helicase; RNA Helicase II/Gu Beta; Nucleolar Protein GU2; Nucleolar Protein Gu2; EC 3.6.4.13; EC 3.6.1; Mcdrh**
Immunogen	**Recombinant protein of human DDX50**

KD-Validated Anti-DDX50 Mouse Monoclonal Antibody - Additional Information

Gene ID	**79009**

Other Names
ATP-dependent RNA helicase DDX50, 3.6.4.13, DEAD box protein 50, Gu-beta, Nucleolar protein Gu2, DDX50

KD-Validated Anti-DDX50 Mouse Monoclonal Antibody - Protein Information

Name DDX50

Function
ATP-dependent RNA helicase that may play a role in various aspects of RNA metabolism including pre-mRNA splicing or ribosomal RNA production (PubMed:12027455). Also acts as a viral restriction factor and promotes the activation of the NF-kappa-B and IRF3 signaling pathways following its stimulation with viral RNA or infection with RNA and DNA viruses (PubMed:35215908). For instance, decreases vaccinia virus, herpes simplex virus, Zika virus or dengue virus replication during the early stage of infection (PubMed:28181036, PubMed:35215908). Mechanistically, acts via the adapter TICAM1 and independently of the DDX1-DDX21-DHX36 helicase complex to induce the production of interferon-beta (PubMed:35215908).

Cellular Location
Nucleus, nucleolus. Cytoplasm Note=Accumulates in the cytoplasm to activate signaling upstream of IRF3 during viral infection.

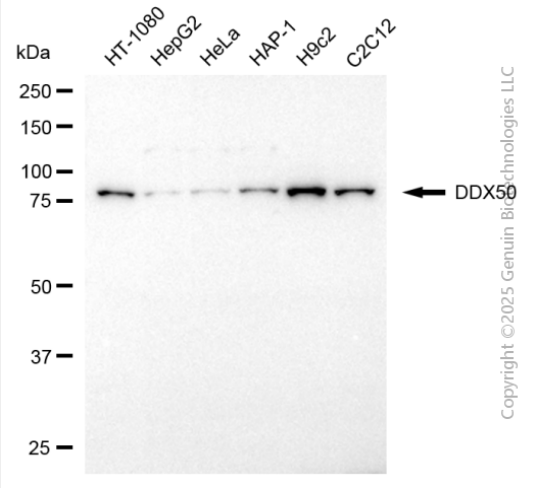
Tissue Location
Highest expression in skeletal muscle, liver, heart, placenta, and kidney.

KD-Validated Anti-DDX50 Mouse Monoclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

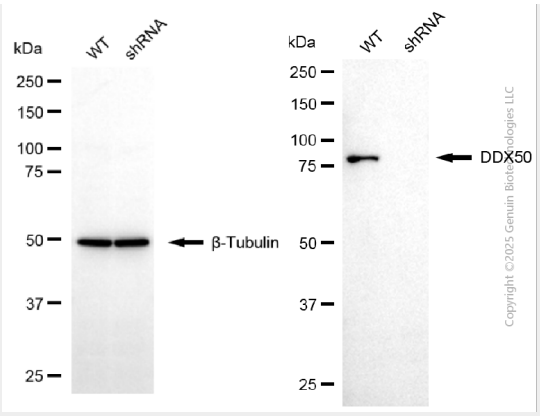
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-DDX50 Mouse Monoclonal Antibody - Images

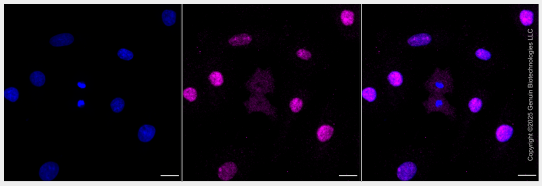


Western blotting analysis using anti-DDX50 antibody (Cat#AGI2047). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-DDX50 antibody (Cat#AGI2047, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999



Western blotting analysis using anti-DDX50 antibody (Cat#AGI2047). DDX50 expression in wild type (WT) and DDX50 shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. β-Tubulin serves as a loading control. The blot was incubated with anti-DDX50 antibody (Cat#AGI2047, 1:2,500) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Immunocytochemical staining of H9c2 cells with anti-DDX50 antibody (Cat#AGI2047, 1:1,000). Nuclei were stained blue with DAPI; DDX50 was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Low. Scale bar, 20 µm.