

#### KD-Validated Anti-GEMIN8 Mouse Monoclonal Antibody Mouse monoclonal antibody Catalog # AGI2064

## **Specification**

## **KD-Validated Anti-GEMIN8 Mouse Monoclonal Antibody - Product Information**

Application Primary Accession Reactivity Clonality Isotype Calculated MW Gene Name Aliases WB <u>O9NWZ8</u> Rat, Human, Mouse Monoclonal Mouse IgG1 Predicted, 29 kDa, observed, 31 kDa KDa GEMIN8 GEMIN8; Gem Nuclear Organelle Associated Protein 8; FAM51A1; Family With Sequence Similarity 51, Member A1; Gem-Associated Protein 8; FLJ20514; Gemin-8; Gem (Nuclear Organelle) Associated Protein 8; Protein FAM51A1 Recombinant protein of human GEMIN8

Immunogen

### **KD-Validated Anti-GEMIN8 Mouse Monoclonal Antibody - Additional Information**

Gene ID 54960 Other Names Gem-associated protein 8, Gemin-8, Protein FAM51A1, GEMIN8, FAM51A1

### **KD-Validated Anti-GEMIN8 Mouse Monoclonal Antibody - Protein Information**

Name GEMIN8

Synonyms FAM51A1

#### Function

The SMN complex catalyzes the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome, and thereby plays an important role in the splicing of cellular pre- mRNAs. Most spliceosomal snRNPs contain a common set of Sm proteins SNRPB, SNRPD1, SNRPD2, SNRPD3, SNRPE, SNRPF and SNRPG that assemble in a heptameric protein ring on the Sm site of the small nuclear RNA to form the core snRNP (Sm core). In the cytosol, the Sm proteins SNRPD1, SNRPD1, SNRPD2, SNRPE, SNRPF and SNRPG are trapped in an inactive 6S plCln-Sm complex by the chaperone CLNS1A that controls the assembly of the core snRNP. To assemble core snRNPs, the SMN complex accepts the trapped 5Sm proteins from CLNS1A forming an intermediate. Binding of snRNA inside 5Sm triggers eviction of the SMN complex, thereby allowing binding of SNRPD3 and SNRPB to complete assembly of the core snRNP.

#### **Cellular Location**

Nucleus, gem. Cytoplasm. Note=Found in nuclear bodies called gems (Gemini of Cajal bodies) that are often in proximity to Cajal (coiled) bodies. Also found in the cytoplasm



# **KD-Validated Anti-GEMIN8 Mouse Monoclonal Antibody - Protocols**

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

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## **KD-Validated Anti-GEMIN8 Mouse Monoclonal Antibody - Images**



Western blotting analysis using anti-GEMIN8 antibody (Cat#AGI2064). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-GEMIN8 antibody (Cat#AGI2064, 1:1,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.



Western blotting analysis using anti-GEMIN8 antibody (Cat#AGI2064). GEMIN8 expression in wild-type (WT) and GEMIN8 shRNA knockdown (KD) HeLa cells with 20  $\mu$ g of total cell lysates. Hsp90  $\alpha$  serves as a loading control. The blot was incubated with anti-GEMIN8 antibody (Cat#AGI2064, 1:1,000) and HRP-conjugated goat anti-mouse secondary antibody respectively.