

STRAP / MAWD Antibody (aa230-280) Rabbit Polyclonal Antibody Catalog # ALS11934

Specification

STRAP / MAWD Antibody (aa230-280) - Product Information

Application Primary Accession Reactivity

Host Clonality Calculated MW Dilution WB, IHC-P <u>O9Y3F4</u> Human, Mouse, Zebrafish, Monkey, Chicken, Horse, Xenopus, Bovine, Dog Rabbit Polyclonal 38kDa KDa WB~~1:1000 IHC-P~~N/A

STRAP / MAWD Antibody (aa230-280) - Additional Information

Gene ID 11171

Other Names Serine-threonine kinase receptor-associated protein, MAP activator with WD repeats, UNR-interacting protein, WD-40 repeat protein PT-WD, STRAP, MAWD, UNRIP

Target/Specificity A portion of amino acids 230-280 of human STRAP

Reconstitution & Storage Short term 4°C, long term aliquot and store at -20°C, avoid freeze thaw cycles.

Precautions STRAP / MAWD Antibody (aa230-280) is for research use only and not for use in diagnostic or therapeutic procedures.

STRAP / MAWD Antibody (aa230-280) - Protein Information

Name STRAP

Synonyms MAWD, UNRIP

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. STRAP plays a role in the cellular distribution of the SMN complex. Negatively regulates TGF-beta signaling but positively regulates the PDPK1 kinase activity by enhancing its autophosphorylation and by significantly reducing the association of PDPK1 with 14-3-3 protein.

Cellular Location

Cytoplasm. Nucleus. Note=Localized predominantly in the cytoplasm but also found in the nucleus

STRAP / MAWD Antibody (aa230-280) - 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>

STRAP / MAWD Antibody (aa230-280) - Images



Anti-STRAP antibody IHC of human spleen.

STRAP / MAWD Antibody (aa230-280) - Background

The SMN complex plays a catalyst role in the assembly of small nuclear ribonucleoproteins (snRNPs), the building blocks of the spliceosome. 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. In the cytosol, the Sm proteins 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. Dissociation by the SMN complex of CLNS1A from the trapped Sm proteins and their transfer to an SMN-Sm complex triggers the assembly of core snRNPs and their transport to the nucleus. STRAP plays a role in the cellular distribution of the SMN complex. Negatively regulates TGF-beta signaling but positively regulates the PDPK1 kinase activity by enhancing its autophosphorylation and by significantly reducing the association of PDPK1 with 14-3-3 protein.



STRAP / MAWD Antibody (aa230-280) - References

Hunt S.L., et al. Genes Dev. 13:437-448(1999). Matsuda S., et al. Cancer Res. 60:13-17(2000). Ye M., et al. Submitted (JUN-1999) to the EMBL/GenBank/DDBJ databases. Liu J., et al. Submitted (JUL-2001) to the EMBL/GenBank/DDBJ databases. Wiemann S., et al. Genome Res. 11:422-435(2001).