

# **FUSIP1** Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP55099

### **Specification**

# **FUSIP1** Polyclonal Antibody - Product Information

Application WB, IHC-P, IHC-F, IF, ICC, E

Primary Accession <u>075494</u>

Reactivity Rat, Pig, Dog, Bovine Rabbit

Clonality Polyclonal
Calculated MW 31 KDa
Physical State Liquid

Immunogen KLH conjugated synthetic peptide derived

from human FUSIP1

Epitope Specificity 151-250/262

Isotype IgG
Purity

Buffer 0.01M TBS (pH7.4) with 1% BSA, 0.02%

SUBCELLULAR LOCATION Proclin300 and 50% Glycerol.
Nucleus speckle. Cytoplasm.

SIMILARITY Belongs to the splicing factor SR family.

Contains 1 RRM (RNA recognition motif)

SUBUNIT domain.
The pho

BUNIT

The phosphorylated but not the dephosphorylated form interacts with TRA2B/SFRS10. The dephosphorylated form interacts with SNRNR70. Isoform 1

form interacts with SNRNP70. Isoform 1

and isoform 3 interact with FUS

C-terminus.

Post-translational modifications

Phosphorylated. Fully dephosphorylated in mitosis and partially dephosphorylated on heat shock. Isoform 3 is phosphorylated on

Ser-168.

Important Note This product as supplied is intended for

research use only, not for use in human, therapeutic or diagnostic applications.

### **Background Descriptions**

affinity purified by Protein A

FUSIP1 is a member of the Serine/Arginine (SR) family of splicing factors. Members of the SR family all contain one or more RNA recognition motifs (RRM) and an SR-rich domain. SR factors are not only essential for constitutive splicing but also regulate splicing in a concentration-dependent manner by influencing the selection of alternative splice sites. Expressed in a variety of tissues with low expression in kidney, liver and heart, FUSIP1 localizes to the cytoplasm and nuclear speckles. In its dephosphorylated form (occurring during M phase of the cell cycle), FUSIP1 functions as a potent general repressor of pre-mRNA splicing and can interact with U1 SnRNP 70. In its phosphorylated form, FUSIP1 interacts with Tra-2 $\int$  and, together, they may cooperate in the regulation of splicing. Four isoforms exist for FUSIP1. In neurons, FUSIP1 isoforms may act to either positively or negatively regulate alternative splicing.



# **FUSIP1** Polyclonal Antibody - Additional Information

#### **Gene ID 10772**

### **Other Names**

Serine/arginine-rich splicing factor 10, 40 kDa SR-repressor protein, SRrp40, FUS-interacting serine-arginine-rich protein 1, Splicing factor SRp38, Splicing factor, arginine/serine-rich 13A, TLS-associated protein with Ser-Arg repeats, TASR, TLS-associated protein with SR repeats, TLS-associated serine-arginine protein, TLS-associated SR protein, SRSF10, FUSIP1, FUSIP2, SFRS13A, TASR

# Target/Specificity

Widely expressed.

# **Dilution**

```
<span class ="dilution_WB">WB~~1:1000</span><br \><span class
="dilution_IHC-P">IHC-P~~N/A</span><br \><span class
="dilution_IHC-F">IHC-F~~N/A</span><br \><span class
="dilution_IF">IF~~1:50~200</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span><br \><span class ="dilution_ICC">ICC~~N/A</span>
```

#### Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

### **FUSIP1** Polyclonal Antibody - Protein Information

Name SRSF10

Synonyms FUSIP1, FUSIP2, SFRS13A, TASR

# **Function**

Splicing factor that in its dephosphorylated form acts as a general repressor of pre-mRNA splicing (PubMed:<a href="http://www.uniprot.org/citations/11684676" target=" blank">11684676</a>, PubMed: <a href="http://www.uniprot.org/citations/12419250" target="blank">12419250</a>, PubMed: <a href="http://www.uniprot.org/citations/14765198" target="blank">14765198</a>). Seems to interfere with the U1 snRNP 5'-splice recognition of SNRNP70 (PubMed:<a href="http://www.uniprot.org/citations/14765198" target=" blank">14765198</a>). Required for splicing repression in M-phase cells and after heat shock (PubMed:<a href="http://www.uniprot.org/citations/14765198" target=" blank">14765198</a>). Also acts as a splicing factor that specifically promotes exon skipping during alternative splicing (PubMed: <a href="http://www.uniprot.org/citations/26876937" target=" blank">26876937</a>). Interaction with YTHDC1, a RNA-binding protein that recognizes and binds N6-methyladenosine (m6A)-containing RNAs, prevents SRSF10 from binding to its mRNA-binding sites close to m6A-containing regions, leading to inhibit exon skipping during alternative splicing (PubMed:<a href="http://www.uniprot.org/citations/26876937" target=" blank">26876937</a>). May be involved in regulation of alternative splicing in neurons, with isoform 1 acting as a positive and isoform 3 as a negative regulator (PubMed: <a href="http://www.uniprot.org/citations/12419250" target=" blank">12419250</a>).

### **Cellular Location**

Nucleus speckle. Cytoplasm



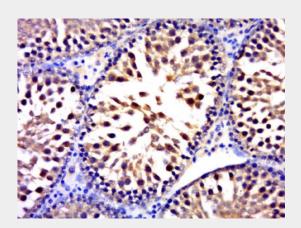
**Tissue Location** Widely expressed.

# **FUSIP1** Polyclonal Antibody - Protocols

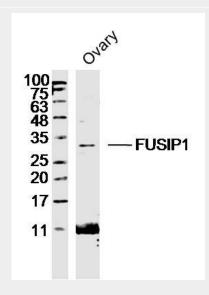
Provided below are standard protocols that you may find useful for product applications.

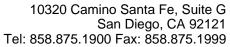
- Western Blot
- Blocking Peptides
- Dot Blot
- <u>Immunohistochemistry</u>
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# FUSIP1 Polyclonal Antibody - Images



Paraformaldehyde-fixed, paraffin embedded (rat testis); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (FUSIP1) Polyclonal Antibody, Unconjugated (bs-13229R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.







Sample: Ovary (Mouse) Lysate at 40 ug

Primary: Anti- FUSIP1 (bs-13229R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 31kD Observed band size: 31kD