

**FUS Antibody**  
**Rabbit Polyclonal Antibody**  
**Catalog # ABV10590****Specification**

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**FUS Antibody - Product Information**

Application	WB, IP
Primary Accession	<a href="#">P35637</a>
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	53426

**FUS Antibody - Additional Information****Gene ID** 2521**Application & Usage**

**Western blotting (1:500 - 1:2000) and Immunoprecipitation.** HeLa cell lysate can be used as a positive control. However, the optimal concentrations should be determined individually. The antibody recognizes the FUS of human origin. Based on sequence identity, the antibody should also react with mouse samples. Reactivity to other species has not been tested.

**Other Names**

FUS, Fusion (involved in t(12;16) in malignant liposarcoma), TLS, Translocated in liposarcoma protein, Pigpen, POMp75

**Target/Specificity**

FUS

**Antibody Form**

Liquid

**Appearance**

Colorless liquid

**Formulation**

100 µl purified rabbit polyclonal antibody in phosphate-buffered saline (PBS) containing 30% glycerol, 1% BSA and 0.02% thimerosal.

**Handling**

The antibody solution should be gently mixed before use.

**Reconstitution & Storage**

-20 °C

## Background Descriptions

### Precautions

FUS Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

## FUS Antibody - Protein Information

### Name FUS

### Synonyms TLS

### Function

DNA/RNA-binding protein that plays a role in various cellular processes such as transcription regulation, RNA splicing, RNA transport, DNA repair and damage response (PubMed:<a href="http://www.uniprot.org/citations/27731383" target="\_blank">27731383</a>). Binds to nascent pre-mRNAs and acts as a molecular mediator between RNA polymerase II and U1 small nuclear ribonucleoprotein thereby coupling transcription and splicing (PubMed:<a href="http://www.uniprot.org/citations/26124092" target="\_blank">26124092</a>). Binds also its own pre- mRNA and autoregulates its expression; this autoregulation mechanism is mediated by non-sense-mediated decay (PubMed:<a href="http://www.uniprot.org/citations/24204307" target="\_blank">24204307</a>). Plays a role in DNA repair mechanisms by promoting D-loop formation and homologous recombination during DNA double-strand break repair (PubMed:<a href="http://www.uniprot.org/citations/10567410" target="\_blank">10567410</a>). In neuronal cells, plays crucial roles in dendritic spine formation and stability, RNA transport, mRNA stability and synaptic homeostasis (By similarity).

### Cellular Location

Nucleus Note=Displays a punctate pattern inside the nucleus and is excluded from nucleoli.

### Tissue Location

Ubiquitous.

## FUS 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 Cytometry](#)
- [Cell Culture](#)

## FUS Antibody - Images

## FUS Antibody - Background

FUS has been identified as a frequent translocation fusion partner of various transcription factors. FUS fusion genes have been shown to be associated with multiple tumor types which include liposarcoma, leukemia, histiocytoma, and sarcoma. FUS is a multifunctional RNA-binding protein that associates with the nuclear matrix and Cajal bodies and appears to play a role in spliceosome

assembly, pre-mRNA splicing, DNA repair, transcriptional regulation and homologous recombination.