

**FUS Antibody (C-term) Blocking peptide**  
**Synthetic peptide**  
**Catalog # BP10187b****Specification**

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**FUS Antibody (C-term) Blocking peptide - Product Information**

Primary Accession [P35637](#)  
Other Accession [NP\\_001164105.1](#), [NP\\_004951.1](#)

**FUS Antibody (C-term) Blocking peptide - Additional Information**

**Gene ID** 2521

**Other Names**

RNA-binding protein FUS, 75 kDa DNA-pairing protein, Oncogene FUS, Oncogene TLS, POMp75, Translocated in liposarcoma protein, FUS, TLS

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**FUS Antibody (C-term) Blocking peptide - 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 (C-term) Blocking peptide - Protocols**

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

- [Blocking Peptides](#)

**FUS Antibody (C-term) Blocking peptide - Images****FUS Antibody (C-term) Blocking peptide - Background**

This gene encodes a multifunctional protein component of the heterogeneous nuclear ribonucleoprotein (hnRNP) complex. The hnRNP complex is involved in pre-mRNA splicing and the export of fully processed mRNA to the cytoplasm. This protein belongs to the FET family of RNA-binding proteins which have been implicated in cellular processes that include regulation of gene expression, maintenance of genomic integrity and mRNA/microRNA processing. Alternative splicing results in multiple transcript variants. Defects in this gene result in amyotrophic lateral sclerosis type 6.

**FUS Antibody (C-term) Blocking peptide - References**

Kim, S.H., et al. J. Biol. Chem. 285(44):34097-34105(2010) Mackenzie, I.R., et al. Lancet Neurol 9(10):995-1007(2010) Yan, J., et al. Neurology 75(9):807-814(2010) Waibel, S., et al. Neurology 75(9):815-817(2010) Baumer, D., et al. Neurology 75(7):611-618(2010)