

FUS Antibody (C-term) Blocking peptide

Synthetic peptide Catalog # BP10187b

Specification

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

Primary Accession <u>P35637</u>

Other Accession <u>NP_001164105.1</u>, <u>NP_004951.1</u>

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:27731383). 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:26124092). Binds also its own pre- mRNA and autoregulates its expression; this autoregulation mechanism is mediated by non-sense-mediated decay (PubMed:24204307). Plays a role in DNA repair mechanisms by promoting D-loop formation and homologous recombination during DNA double-strand break repair (PubMed:10567410). In neuronal cells, plays crucial roles in dendritic spine formation and stability, RNA transport, mRNA stability and synaptic homeostasis (By similarity).



Tel: 858.875.1900 Fax: 858.875.1999

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. ThehnRNP complex is involved in pre-mRNA splicing and the export offully processed mRNA to the cytoplasm. This protein belongs to the FET family of RNA-binding proteins which have been implicated incellular 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 type6.

FUS Antibody (C-term) Blocking peptide - References

Kim, S.H., et al. J. Biol. Chem. 285(44):34097-34105(2010)Mackenzie, J.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)