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FUS Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP10187b

Product Information

Application	WB, IHC-P, IF, FC, E
Primary Accession	P35637
Other Accession	P56959, Q28009, NP_001164105.1
Reactivity	Human, Mouse
Predicted	Bovine, Rat, Canine, Rabbit, Chicken
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB23928
Calculated MW	53426
Antigen Region	499-526

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
Target/Specificity	This FUS antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 499-526 amino acids from the C-terminal region of human FUS.
Dilution	WB~~1:1000 IHC-P~~1:100~500 IF~~1:10~50 FC~~1:10~50 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	FUS Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

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 ssRNA containing the consensus sequence 5'-AGGUAA-3' (PubMed:21256132). 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). Also binds 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).
Cellular Location	Nucleus Note=Displays a punctate pattern inside the nucleus and is excluded from nucleoli.
Tissue Location	Ubiquitous.

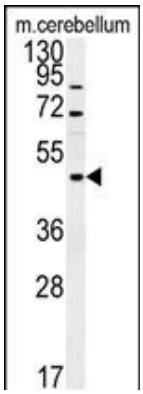
Background

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.

References

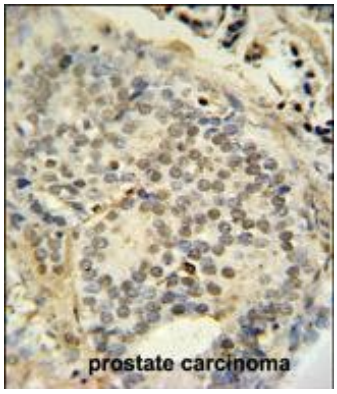
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Images

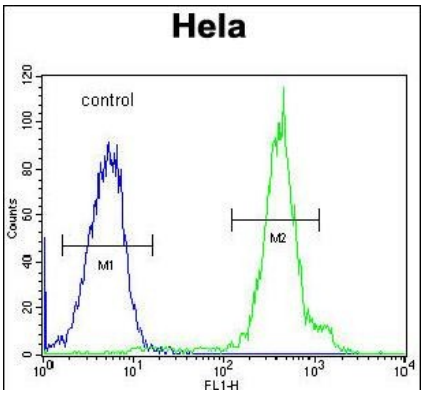


FUS Antibody (C-term) (Cat. #AP10187b) western blot analysis in mouse cerebellum tissue lysates (15ug/lane).This demonstrates the FUS antibody detected FUS protein (arrow).

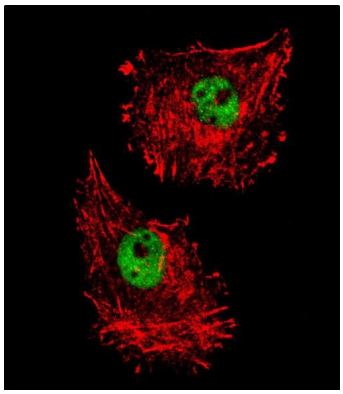
FUS antibody (C-term) (Cat. #AP10187b) immunohistochemistry analysis in formalin fixed and paraffin embedded human prostate carcinoma followed by peroxidase conjugation of the secondary antibody and DAB staining. This data demonstrates the use of the FUS



antibody (C-term) for immunohistochemistry. Clinical relevance has not been evaluated.



FUS Antibody (C-term) (Cat. #AP10187b) flow cytometric analysis of Hela cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.



Confocal immunofluorescent analysis of FUS Antibody (C-term)(Cat#AP10187b) with MDA-MB231 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.