Anti-FUS Antibody

Alternative Names: ALS6, ETM4, HNRNPP2, POMP75, TLS, fused in sarcoma, translocated in liposarcoma

Catalogue Number: AB18-10074-50ug

Size: 50 µg

Background Information

FUS (fused in sarcoma) is a member of the FET/TET (FUS/TLS, EWS, TAF15) family of RNA-binding proteins (RBPs) that have roles in transcription, pre-mRNA splicing, DNA repair, and mRNA transport in neurons.
FUS (like all FET family members) is highly conserved and ubiquitously expressed, with several conserved domains: a serine-tyrosine-glycine-glutamine (SYGQ) domain embedded in the DNA activation domain (AD), 3 glycine-arginine (RGG) rich regions that affect RNA binding, one conserved RNA-binding domain (RBD, formed by a RNA-recognition motif, RRM), and a zinc finger domain that is also involved in nucleic acid binding [1].
FUS binds to single and double stranded DNA as well as RNA and participates in multiple cellular functions. Alternative splicing results in multiple transcript variants. Defects in the FUS gene are associated with amyotrophic lateral sclerosis (ALS). FUS is also implicated in a number of other neurodegenerative disorders.

Product Information

Antibody Type:	Polyclonal	**Host:**	Rabbit
Isotype:	IgG	**Species Reactivity:**	Human

Immunogen: Partial length recombinant protein from the C-terminal region of human FUS

Format: 50 µg in 50 µl PBS containing 0.02% sodium azide.

Storage Conditions: 6 months: 4˚C. Long-term storage: -20˚C. Avoid multiple freeze and thaw cycles.

Applications: WB

WB 1:500-2000.

Additional Information

Subcellular location:	Nucleus	**MW:**	53kDa (Intended as a general guide and does not allow for all isoforms and species variations)
Gene ID	2521	**Uniprot ID:**	P35637

References

[1] Role of FET proteins in neurodegenerative disorders
Francesca Svetoni, Paola Frisone, Maria Paola Paronetto
RNA Biol. 2016; 13(11): 1089–1102. Published online 2016 Jul 14. doi: 10.1080/15476286.2016.1211225
[2] Functions of FUS/TLS From DNA Repair to Stress Response: Implications for ALS
Reddy Ranjith Kumar Sama, Catherine L. Ward, Daryl A. Bosco
ASN Neuro. 2014 May-Jun; 6(4): 1759091414544472. doi: 10.1177/1759091414544472