



Anti-FUS Antibody

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

Catalogue Number: AB19-10104-50ug

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

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|----------------------------|--|----------------------------|--------------|
| Antibody Type: | Polyclonal | Host: | Rabbit |
| Isotype: | IgG | Species Reactivity: | Human, Mouse |
| Immunogen: | Full length recombinant human FUS | | |
| Format: | 50 µg in 50 µl PBS with 0.03% Proclin300, 50% glycerol, pH7.3. | | |
| Storage Conditions: | Store at -20°C. Avoid freeze / thaw cycles. | | |
| Applications: | IHC IHC 1:30-150. | | |

Additional Information

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| 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