

## Product datasheet for TP301808L

### FUS (NM\_004960) Human Recombinant Protein

#### Product data:

**Product Type:** Recombinant Proteins

**Description:** Recombinant protein of human fusion (involved in t(12;16) in malignant liposarcoma) (FUS), 1 mg

**Species:** Human

**Expression Host:** HEK293T

**Expression cDNA Clone or AA Sequence:** >RC201808 protein sequence  
Red=Cloning site Green=Tags(s)

MASNDYTQQATQSYGAYPTQPGQGYSQQSSQPYGQQSYSGYSQSTDTSGYGQSSYSSYGQSQNTGYGTQS  
TPQGYGSTGGYGSSQSSQSSYQSSYPGYGQQPAPSSSTSGSYGSSSSQSSSYGQPQSGSYSQQPSYGGQQ  
QSYGQQQSYNPPQGYGQQNQYNSSSGGGGGGGGGGNYGQDQSSMSSGGGSGGGYGNQDQSGGGGSGGGYGO  
QDRGGRGRGGSGGGGGGGGGGYNRSSGGYEPGRGRGGRRGGMGGSDRGGFNKFGGPRDQGSRHDSEQD  
NSDNNTIFVQGLGENVTIESVADYFKQIGIIKTNKKTGQPMINLYTDRETGKLKGEATVSFDDPPSAKAA  
IDWFDGKEFSGNPIKVSFATRRADFNRGGGNGRGGRRGGPMGRGGYGGGGSGGGRRGGFPSGGGGGGGGQ  
QRAGDWKCPNPTCENMNFWRNECNQCKAPKPDGPGGGPGGSHMGGNYGDDRRGGRRGGYDRGGYRGRGGD  
RGGFRGGRRGGDRGGFGPGKMDSRGEHRQDRRERPY

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

**Tag:** C-Myc/DDK

**Predicted MW:** 53.2 kDa

**Concentration:** >0.1 µg/µL as determined by microplate BCA method

**Purity:** > 80% as determined by SDS-PAGE and Coomassie blue staining

**Buffer:** 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

**Bioactivity:** Transmission electron microscopy (PMID: [26286827](#))  
Co-immunoprecipitation (PMID: [27164932](#))  
In vitro kinase assay inhibitor (PMID: [29513652](#))

**Preparation:** Recombinant protein was captured through anti-DDK affinity column followed by conventional chromatography steps.

**Note:** For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.



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**Storage:** Store at -80°C.

**Stability:** Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.

**RefSeq:** [NP\\_004951](#)

**Locus ID:** 2521

**UniProt ID:** [P35637](#), [Q6IBQ5](#)

**RefSeq Size:** 5119

**Cytogenetics:** 16p11.2

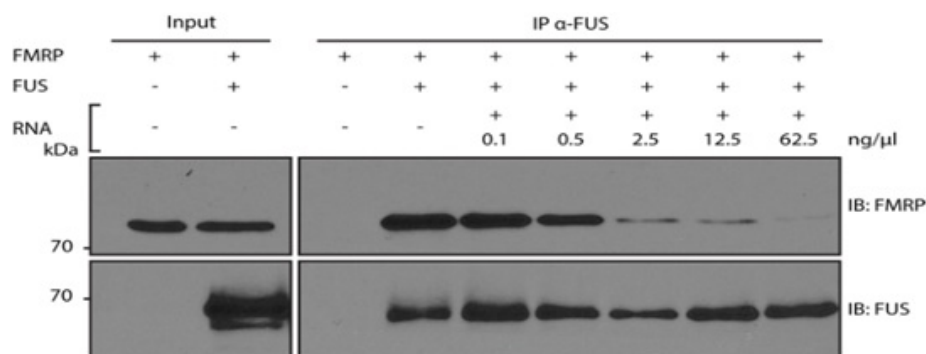
**RefSeq ORF:** 1578

**Synonyms:** ALS6; altFUS; ETM4; FUS1; HNRNPP2; POMP75; TLS

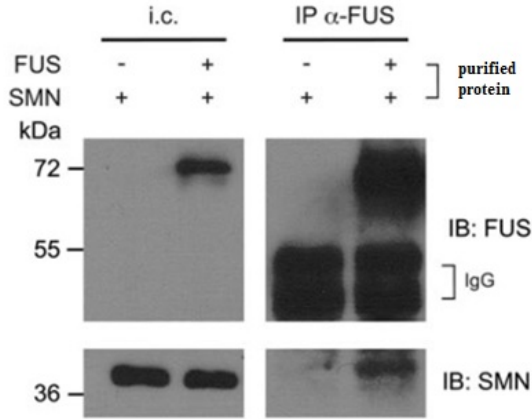
**Summary:** This gene encodes a multifunctional protein component of the heterogeneous nuclear ribonucleoprotein (hnRNP) complex. The hnRNP complex is involved in pre-mRNA splicing and the export of fully processed mRNA to the cytoplasm. This protein belongs to the FET family of RNA-binding proteins 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. [provided by RefSeq, Sep 2009]

**Protein Families:** Druggable Genome, Stem cell - Pluripotency

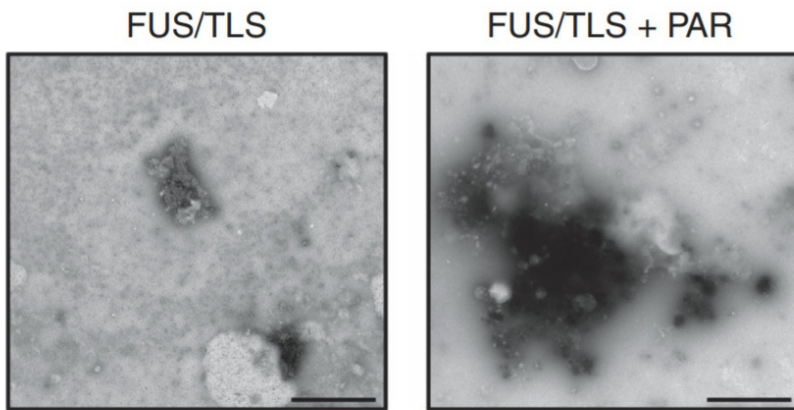
### Product images:



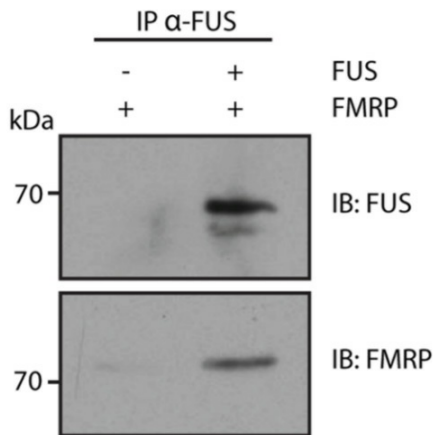
Recombinant FMRP and FUS proteins ([TP301808]) were mixed and RNA was added in increasing concentrations. Protein mixtures were incubated and immunoprecipitated with anti-FUS antibody and subjected to immunoblotting with the indicated antibodies. Figure cited from *Acta Neuropathol* 2016. PMID: 27164932



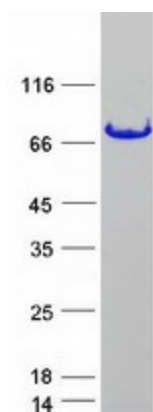
Purified FUS ([TP301808]) and SMN proteins ([TP321108]) were mixed and immunoprecipitated with IgG (control) or anti-FUS antibodies. Immunoprecipitates were analyzed with the indicated antibodies. Figure cited from Hum. Mol. Genet. 2013, PMID: 23681068



Full-length recombinant FUS/TLS (OriGene [TP301808]) was incubated at 37 C for 24 hours with or without sub-stoichiometric amounts of purified PAR. Protein aggregates were analyzed by transmission electron microscopy. Figure cited from Nat Commun, PMID: 26286827



Characterization of FMRP-FUS binding. Recombinant FUS (OriGene [TP301808]) and FMRP proteins were mixed and immunoprecipitated with anti-FUS antibodies. Samples were analyzed in Western blot with the indicated antibodies. Figure cited from Acta Neuropathol, PMID: 27164932



Coomassie blue staining of purified FUS protein (Cat# [TP301808]). The protein was produced from HEK293T cells transfected with FUS cDNA clone (Cat# [RC201808]) using MegaTran 2.0 (Cat# [TT210002]).