

Purified anti-FIS Antibody

Catalog# / Size	861301 / 25 µg
Clone	Poly28613
Regulatory Status	RUO
Other Names	Mitochondrial fission 1 protein, FIS1, Tetratricopeptide repeat protein 11, TPR repeat protein 11, TTC11, FIS1 Homolog, Fission, Mitochondrial 1, hFIS1
Isotype	Rabbit Polyclonal IgG
Description	Mitochondria are dynamic organelles that vary in copy number, size, and position in any give cell type, often reflecting the energy requirements of the cell. Fusion and Fission is a well conserved and complex process for mitochondria morphology homeostasis, dysfunction of which is linked to many disorders. Human FIS1 protein, a homolog of yeast FIS1p, was identified as a mitochondria outer membrane protein. Overexpression of FIS1 leads to mitochondrial fragmentation and aggregation in mammalian cells caused by excessive fission events. Aberrant mitochondrial fragmentation leads to cytochrome C release and induction of apoptosis. Depletion of Fis1 induces mitochondrial fusion and elongation.

Product Details

Verified Reactivity	Human, Mouse, Rat
Antibody Type	Polyclonal
Host Species	Rabbit
Immunogen	Recombinant FIS1 (Met1-Asp121) expressed in E.coli.
Formulation	0.01 M PBS, pH7.4, containing 0.02% NaN ₃ , 50% glycerol.
Preparation	The antibody was purified by affinity chromatography.
Concentration	0.5 mg/ml
Storage & Handling	Store at 4°C for up to 3 months. For longer term storage aliquot into small volumes and store at -20°C.
Application	WB - Quality tested IHC-P - Verified
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 1.0 - 5.0 µg per ml. For immunohistochemistry, a concentration range of 1.0 - 10 µg/ml is suggested. It is recommended that the reagent be titrated for optimal performance for each application.
RRID	AB_2810743 (BioLegend Cat. No. 861301)

Antigen Details

Structure	Human FIS1 is a 152 amino acid protein with a molecular mass of 17 kD.
Distribution	Tissue distribution: Ubiquitously expressed Cellular distribution: Peroxisome and mitochondria
Function	FIS1 is involved in the fragmentation of the mitochondrial network and its perinuclear patterning.
Interaction	Interacts with DNM1L/DLP1, MARCH5, MIEF1, PEX11A, PEX11B, PEX11G.
Antigen References	<ol style="list-style-type: none">1. Stojanovski D, <i>et al.</i> 2004. <i>J Cell Sci.</i> 117(Pt 7):1201-10.2. James DI, <i>et al.</i> 2003. <i>J Biol Chem.</i> 278(38):36373-9.

Related Protocols

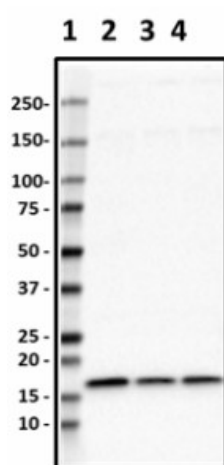
[Immunohistochemistry Protocol for Keratin Antibodies](#)

[Western Blotting Protocol](#)

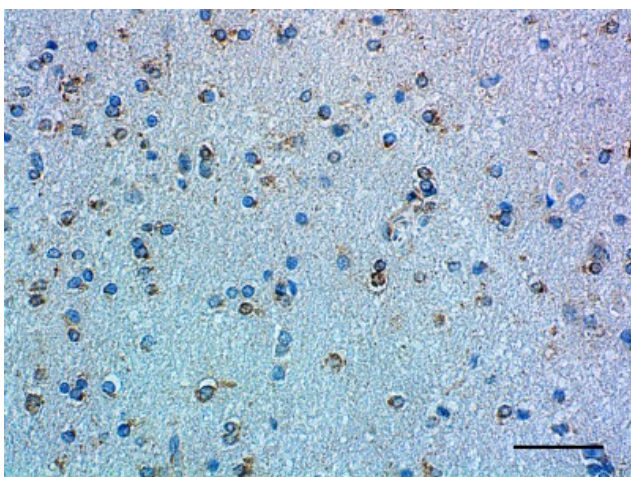
Other Formats

Purified anti-FIS

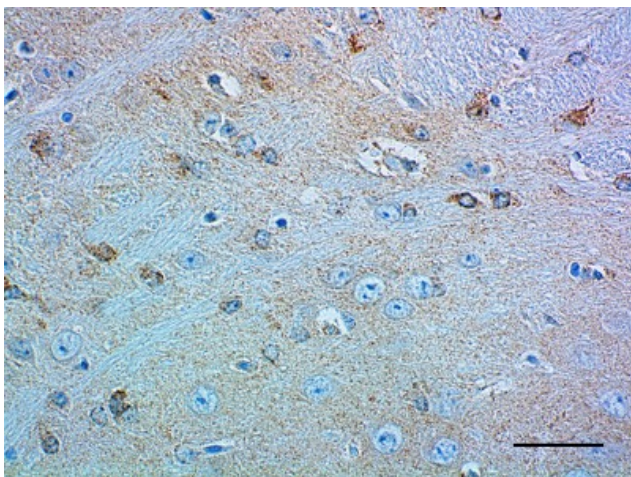
Product Data



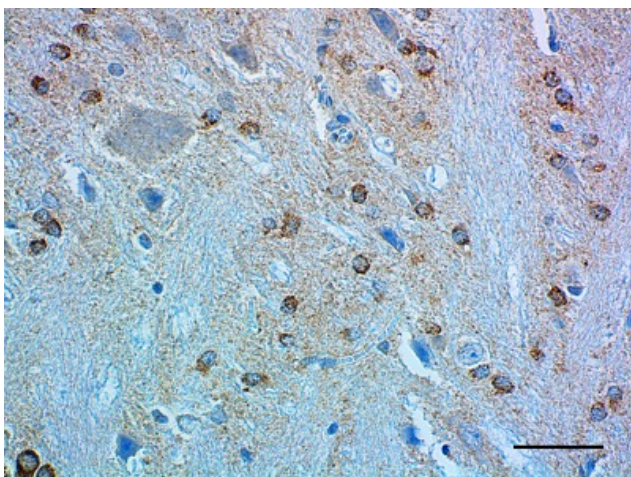
Western blot of purified anti-FIS antibody (Poly28613). Lane 1: Molecular weight marker; Lane 2: 20 µg of human brain lysate; Lane 3: 20 µg of mouse brain lysate; Lane 4: 20 µg of rat brain lysate. The blot was incubated with 1 µg/mL of the primary antibody overnight at 4°C, followed by incubation with HRP-labeled donkey anti-rabbit IgG (Cat. No. 406401). Enhanced chemiluminescence was used as the detection system.



IHC staining of purified anti-FIS antibody (Poly28613) on formalin-fixed paraffin-embedded human brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R., the tissue was incubated with 1 µg/mL of the primary antibody overnight at 4°C. BioLegend's Ultra Streptavidin (USA) HRP Detection Kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50 µm



IHC staining of purified anti-FIS antibody (Poly28613) on formalin-fixed paraffin-embedded mouse brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R., the tissue was incubated with 1 $\mu\text{g}/\text{mL}$ of the primary antibody overnight at 4°C. BioLegend's Ultra Streptavidin (USA) HRP Detection Kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50 μm



IHC staining of purified anti-FIS antibody (Poly28613) on formalin-fixed paraffin-embedded rat brain tissue. Following antigen retrieval using Sodium Citrate H.I.E.R., the tissue was incubated with 1 $\mu\text{g}/\text{mL}$ of the primary antibody overnight at 4°C. BioLegend's Ultra Streptavidin (USA) HRP Detection Kit (Multi-Species, DAB, Cat. No. 929901) was used for detection followed by hematoxylin counterstaining, according to the protocol provided. The image was captured with a 40X objective. Scale bar: 50 μm

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