

Rabbit Anti-Dynamin 2 antibody

SL0574R

Product Name	Dynamin 2
Chinese Name	酶动力蛋白 2 抗体
Alias	CMTD11; CMTD1B; Cytoskeletal protein; DNM 2; DNM2; DYN 2; DYN II; DYN2; Dynamin II; Dynamin2; DynaminII; DYNII; DYN2_HUMAN.
Research Area	Cell biology immunology Neurobiology Signal transduction Cell type markers
Immunogen Species	Rabbit
Clonality	Polyclonal
React Species	Rat, (predicted: Human, Mouse, Cow,) IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500 (Paraffin sections need antigen repair)
Applications	not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Theoretical molecular weight	98kDa
Cellular localization	cytoplasmic The cell membrane
Form	Liquid
Concentration	1mg/ml
immunogen	KLH conjugated synthetic peptide derived from human Dynamin 2: 61-150/870
Lsotype	IgG
Purification	affinity purified by Protein A
Buffer Solution	1M TBS(pH7.4) with 1% BSA, 3% Proclin300 and 50% Glycerol.
Storage	Shipped at 4°C. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Attention	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
PubMed	PubMed
Product	Dynamin 2 is a microtubule-associated force-producing protein involved in building

Detail

microtubule bundles, and it is able to bind and hydrolyze GTP. It is ubiquitously expressed and is likely to be involved in vesicular trafficking processes, especially endocytosis.

Function:

Microtubule-associated force-producing protein involved in producing microtubule bundles and able to bind and hydrolyze GTP. Most probably involved in vesicular trafficking processes, in particular endocytosis.

Subcellular Location:

Cytoplasm. Cytoplasm > cytoskeleton. Cell junction > synapse > postsynaptic cell membrane > postsynaptic density. Cell junction > synapse. Microtubule-associated. Also found in the postsynaptic density of neuronal cells.

DISEASE:

Defects in DNM2 are a cause of centronuclear myopathy autosomal dominant (ADCNM) [MIM:160150]; also known as autosomal dominant myotubular myopathy. Centronuclear myopathies (CNMs) are congenital muscle disorders characterized by progressive muscular weakness and wasting involving mainly limb girdle, trunk, and neck muscles. It may also affect distal muscles. Weakness may be present during childhood or adolescence or may not become evident until the third decade of life. Ptosis is a frequent clinical feature. CNMs comprise a wide spectrum of phenotypes, ranging from severe neonatal to mild late-onset familial forms. The most prominent histopathologic features include high frequency of centrally located nuclei in muscle fibers not secondary to regeneration, radial arrangement of sarcoplasmic strands around the central nuclei, and predominance and hypotrophy of type 1 fibers.

Similarity:

Belongs to the dynamin family.
Contains 1 GED domain.
Contains 1 PH domain.

SWISS:

P50570

Gene ID:

1785

Database links:

[Entrez Gene: 1785](#) Human

[Entrez Gene: 13430](#) Mouse

[Entrez Gene: 25751](#) Rat

[Omin: 602378](#) Human

[SwissProt: P50570](#) Human

[SwissProt: P39054](#) Mouse

[SwissProt: P39052](#) Rat

[Unigene: 211463](#) Human

[Unigene: 433257](#) Mouse

[Unigene: 11231](#) Rat

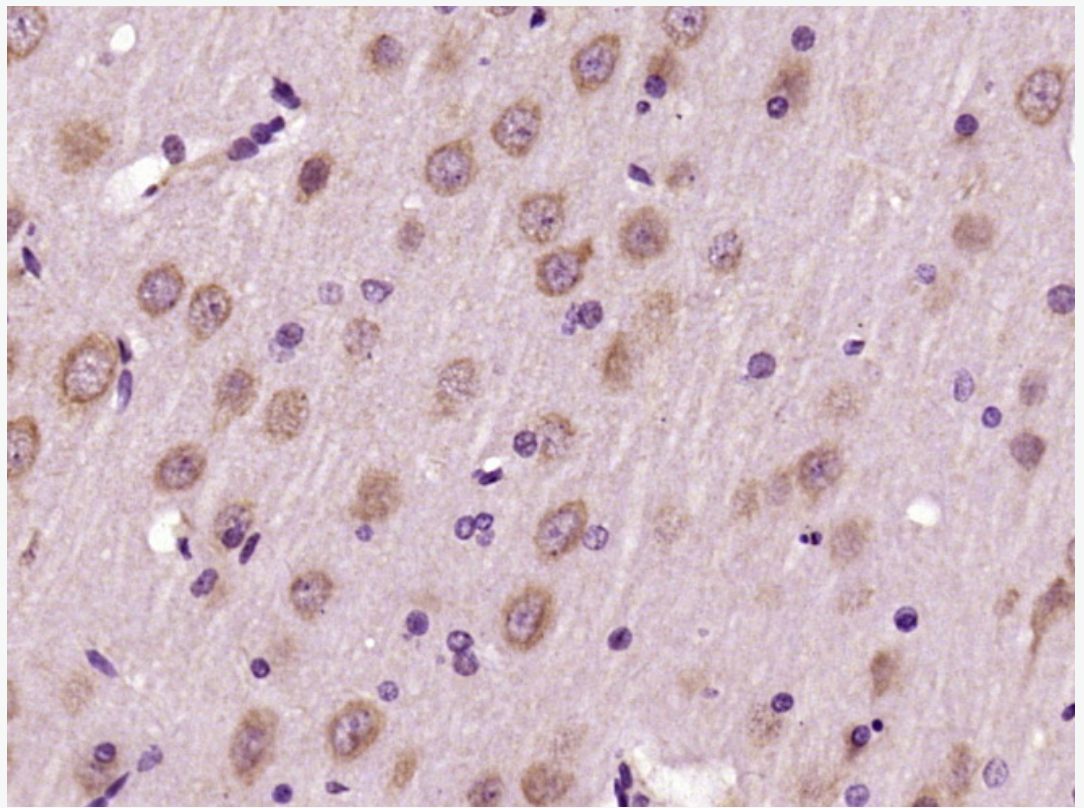
发动蛋白是一种胞质溶胶蛋白, 又称: 酶动力蛋白。能够同 GTP 结合并将 GTP 水解。发动蛋白 2(Dynamin 2)是大的鸟苷三磷酸酶 (GTPases) 和 eNOS 存在相同的膜区室。研究显示 Dynamin 2 能与 eNOS 直接作用增强 eNOS 的活性。Dynamin 2 参与 Caveolae 的内陷活动、小囊的形成与运输以及受体介导的胞吞作用。

Dynamin 2 能和牛主动脉的 endothelial cells 溶菌产物的 eNOS 免疫共沉淀。Ca²⁺ 转运体刺激的 endothelial cells 增强了发动蛋白免疫共沉淀作用, 说明蛋白间的相互作用能够被细胞内的 ca²⁺瞬变所触发。

研究发现发动蛋白 2 的富脯氨酸结构能和 eNOS 还原酶结构的 FAD 部分相互作用, 通过促进电子在 eNOS 还原酶结构的 FAD 和 FMN 间相互转移, 正性调节 eNOS 的活性。

近期又有研究显示 Dynamin 2 能和 Caveolin-1 发生直接作用。

**Product
Picture**



Paraformaldehyde-fixed, paraffin embedded (Rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (DNM2) Polyclonal Antibody, Unconjugated (SL0574R) at 1:400 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.