

# Rabbit Anti-Dynamin 2 antibody

## SL0574R

Product Name:	Dynamin 2
Chinese Name:	酶动力蛋白2抗体
Alias:	CMTDI1; CMTDIB; Cytoskeletal protein; DNM 2; DNM2; DYN 2; DYN II; DYN2; Dynamin II; Dynamin2; DynaminII; DYNII; DYN2_HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Cow,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	98kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or 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
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20 °C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	<u>PubMed</u>
Product Detail:	Dynamin 2 is a microtubule-associated force-producing protein involved in building 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: 1785Human

Entrez Gene: 13430 Mouse

Entrez Gene: 25751Rat

Omim: 602378Human

SwissProt: P50570Human

SwissProt: P39054Mouse

SwissProt: P39052Rat

Unigene: 211463Human

<u>Unigene: 433257</u>Mouse

Unigene: 11231Rat

### **Important Note:**

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

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

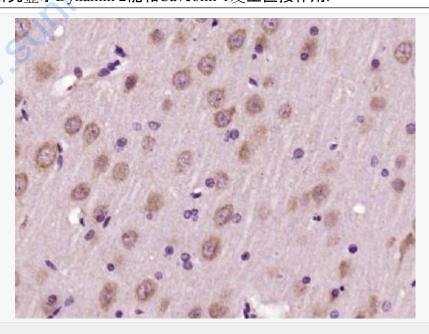
cells溶菌产物的eNOS免疫共沉淀。Ca2+转运体刺激的的endothelial

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.



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.

