

## Rabbit Anti-DCTN1/DAP-150 antibody

SL6929R

Product Name:	DCTN1/DAP-150
Chinese Name:	动力蛋白激活蛋白1抗体
Alias:	Alternative names150 kDa dynein associated polypeptide; 150 kDa dynein-associated polypeptide; DAP 150; DAP-150; DAP150; DCTN 1; DCTN1; DCTN1_HUMAN; DP 150; DP-150; DP150; Dynactin 1 (p150 Glued (Drosophila) homolog); Dynactin 1 (p150 glued homolog Drosophila); Dynactin 1; Dynactin subunit 1; Dynactin1; HMN7B; P135; p150 Glued (Drosophila) homolog; p150 glued; p150 glued homolog; p150(GLUED) DROSOPHILA HOMOLOG OF; p150-glued; p150glued.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Pig, Cow, Horse, Rabbit,
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:	142kDa
Cellular localization:	The nucleuscytoplasmic
Form:	Lyophilized or Liquid
<b>Concentration:</b>	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human DCTN1/Dynactin 1:251- 350/1278
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:	PubMed
Product Detail:	Required for the cytoplasmic dynein-driven retrograde movement of vesicles and

organelles along microtubules. Dynein-dynactin interaction is a key component of the mechanism of axonal transport of vesicles and organelles.

Tissue specificity; Brain.

Involvement in disease; Defects in DCTN1 are the cause of distal hereditary motor neuronopathy type 7B (HMN7B); also known as progressive lower motor neuron disease (PLMND). HMN7B is a neuromuscular disorder. Distal hereditary motor neuronopathies constitute a heterogeneous group of neuromuscular disorders caused by selective degeneration of motor neurons in the anterior horn of the spinal cord, without sensory deficit in the posterior horn. The overall clinical picture consists of a classical distal muscular atrophy syndrome in the legs without clinical sensory loss. The disease starts with weakness and wasting of distal muscles of the anterior tibial and peroneal compartments of the legs. Later on, weakness and atrophy may expand to the proximal muscles of the lower limbs and/or to the distal upper limbs.

Defects in DCTN1 are a cause of susceptibility to amyotrophic lateral sclerosis (ALS). ALS is a neurodegenerative disorder affecting upper and lower motor neurons, and resulting in fatal paralysis. Sensory abnormalities are absent. Death usually occurs within 2 to 5 years. The etiology is likely to be multifactorial, involving both genetic and environmental factors.

Defects in DCTN1 are the cause of Perry syndrome (PERRYS); also called parkinsonism with alveolar hypoventilation and mental depression. Perry syndrome is a neuropsychiatric disorder characterized by mental depression not responsive to antidepressant drugs or electroconvulsive therapy, sleep disturbances, exhaustion and marked weight loss. Parkinsonism develops later and respiratory failure occurred terminally.

## Function:

Required for the cytoplasmic dynein-driven retrograde movement of vesicles and organelles along microtubules. Dynein-dynactin interaction is a key component of the mechanism of axonal transport of vesicles and organelles.

## Subunit:

Large macromolecular complex of at least 10 components; p150(glued) binds directly to microtubules and to cytoplasmic dynein. Interacts with the C-terminus of MAPRE1, MAPRE2 and MAPRE3. Interacts with FBXL5. Interacts with ECM29. Interacts (via C-terminus) with SNX6.

Subcellular Location: Cytoplasm. Cytoplasm, cytoskeleton.

Tissue Specificity: Brain.

Post-translational modifications:

Ubiquitinated by a SCF complex containing FBXL5, leading to its degradation by the proteasome.

## **DISEASE:**

Defects in DCTN1 are the cause of distal hereditary motor neuronopathy type 7B (HMN7B) [MIM:607641]; also known as progressive lower motor neuron disease (PLMND). HMN7B is a neuromuscular disorder. Distal hereditary motor neuronopathies constitute a heterogeneous group of neuromuscular disorders caused by selective degeneration of motor neurons in the anterior horn of the spinal cord, without sensory deficit in the posterior horn. The overall clinical picture consists of a classical distal muscular atrophy syndrome in the legs without clinical sensory loss. The disease starts with weakness and wasting of distal muscles of the anterior tibial and peroneal compartments of the legs. Later on, weakness and atrophy may expand to the proximal muscles of the lower limbs and/or to the distal upper limbs.

Similarity:

Belongs to the dynactin 150 kDa subunit family. biotech.cl Contains 1 CAP-Gly domain.

SWISS: O14203

Gene ID: 1639

Database links:

Entrez Gene: 1639 Human

Entrez Gene: 13191 Mouse

Entrez Gene: 29167 Rat

Omim: 601143 Human

SwissProt: Q14203 Human

SwissProt: O08788 Mouse

SwissProt: P28023 Rat

Unigene: 516111 Human

Unigene: 6919 Mouse

Unigene: 11284 Rat

**Important Note:** This product as supplied is intended for research use only, not for use in human,

t	therapeutic or diagnostic applications.

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