

Rabbit Anti-Myelin PLP antibody

SL11093R

Product Name:	Myelin PLP
Chinese Name:	髓磷酯髓鞘蛋白1抗体
Alias:	Lipophilin; HLD1; Lipophilin; Major myelin proteolipid; Major myelin proteolipid protein; MMPL; Myelin proteolipid protein; MYPR_HUMAN; PLP 1; PLP; PLP/DM20; PLP1; PLP1 protein; PMD; Proteolipid protein 1 (Pelizaeus Merzbacher disease spastic paraplegia 2 uncomplicated); myelin proteolipid protein or lipophilin; Proteolipid protein 1; SPG 2; SPG2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human, Mouse, Rat, Dog, Cow, Horse, Rabbit, Monkey,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=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:	30kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	lmg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Myelin proteolipid protein:21-120/277 <extracellular></extracellular>
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:	PLP is a major constituent of myelin. The two isoforms of the myelin proteolipid protein, PLP and DM20, are very hydrophobic integral membrane proteins that account

for about half of the protein content of adult CNS myelin. A mutation in the gene which encodes PLP is linked to Pelizaeus-Merzbacher disease (PMD), a chronic infantile type of diffuse cerebral sclerosis. The gene which encodes PLP maps to human chromosome Xq22. The glycoprotein zero (also designated P-zero or myelin peripheral protein) is the primary structural protein of peripheral myelin, and accounts for more than 50% of the protein present in the peripheral nerve sheath. Zero is an integral membrane glycoprotein. Expression of zero is restricted to Schwann cells. The gene which encodes zero maps to human chromosome 1q22. PMP22 (peripheral myelin protein 22) is a growth-regulated membrane protein which is expressed by Schwann cells and is localized primarily in compact peripheral nervous system myelin. The gene which encodes PMP22 maps to human chromosome 17p11.2.

Function:

This is the major myelin protein from the central nervous system. It plays an important role in the formation or maintenance of the multilamellar structure of myelin.

Subunit:

Belongs to the myelin proteolipid protein family.

Subcellular Location:

Membrane; Multi-pass membrane protein.

DISEASE:

Defects in PLP1 are the cause of leukodystrophy hypomyelinating type 1 (HLD1) [MIM:312080]; also known as Pelizaeus-Merzbacher disease. HLD1 is an X-linked recessive dysmyelinating disorder of the central nervous system in which myelin is not formed properly. It is characterized clinically by nystagmus, spastic quadriplegia, ataxia, and developmental delay.

Defects in PLP1 are the cause of spastic paraplegia X-linked type 2 (SPG2) [MIM:312920]. SPG2 is characterized by spastic gait and hyperreflexia. In some patients, complicating features include nystagmus, dysarthria, sensory disturbance, mental retardation, optic atrophy.

Similarity:

Belongs to the myelin proteolipid protein family.

SWISS:

P60201

Gene ID:

5354

Database links:

Entrez Gene: 281410Cow

Entrez Gene: 481002Dog

Entrez Gene: 5354Human

Entrez Gene: 18823 Mouse

Entrez Gene: 24943Rat

Omim: 300401 Human

SwissProt: P04116Cow

SwissProt: P23294Dog

SwissProt: P60201Human

SwissProt: P60202Mouse

SwissProt: P60203Rat

Unigene: 49691Cow

Unigene: 1787Human

Unigene: 1268 Mouse

Unigene: 4550Rat

Important Note:

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