

#### PLP1 Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a partial recombinant PLP1. Catalog # AT3346a

### **Specification**

# PLP1 Antibody (monoclonal) (M05) - Product Information

**Application** WB, E **Primary Accession** P60201 Other Accession NM 000533 Reactivity Human Host mouse Clonality **Monoclonal** Isotype IgG2a Kappa Calculated MW 30077

### PLP1 Antibody (monoclonal) (M05) - Additional Information

#### **Gene ID 5354**

#### **Other Names**

Myelin proteolipid protein, PLP, Lipophilin, PLP1, PLP

#### Target/Specificity

PLP1 (NP 000524, 177 a.a. ~ 232 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

# **Dilution**

WB~~1:500~1000

E~~N/A

#### **Format**

Clear, colorless solution in phosphate buffered saline, pH 7.2.

Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

#### **Precautions**

PLP1 Antibody (monoclonal) (M05) is for research use only and not for use in diagnostic or therapeutic procedures.

#### PLP1 Antibody (monoclonal) (M05) - Protocols

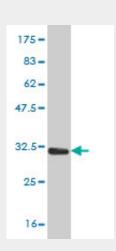
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot

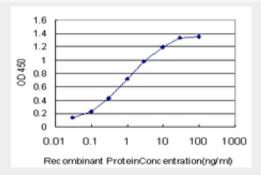


- Immunohistochemistry
- Immunofluorescence
- <u>Immunoprecipitation</u>
- Flow Cytomety
- Cell Culture

# PLP1 Antibody (monoclonal) (M05) - Images



Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (31.9 KDa).



Detection limit for recombinant GST tagged PLP1 is approximately 0.03ng/ml as a capture antibody.

### PLP1 Antibody (monoclonal) (M05) - Background

This gene encodes a transmembrane proteolipid protein that is the predominant myelin protein present in the central nervous system. It may play a role in the compaction, stabilization, and maintenance of myelin sheaths, as well as in oligodendrocyte development and axonal survival. Mutations in this gene cause X-linked Pelizaeus-Merzbacher disease and spastic paraplegia type 2. Alternatively spliced transcript variants encoding distinct isoforms or having different 5' UTRs, have been identified for this gene.

### PLP1 Antibody (monoclonal) (M05) - References

Developmental and degenerative features in a complicated spastic paraplegia. Manzini MC, et al. Ann Neurol, 2010 Apr. PMID 20437587.Magnetic resonance imaging of a unique mutation in a family with Pelizaeus-Merzbacher disease. Miller E, et al. Am J Med Genet A, 2010 Mar. PMID 20186781.Novel neuronal proteolipid protein isoforms encoded by the human myelin proteolipid protein 1 gene. Sarret C, et al. Neuroscience, 2010 Mar 17. PMID 20036320.Hereditary spastic paraplegia caused by the PLP1 'rumpshaker mutation'. Svenstrup K, et al. J Neurol Neurosurg Psychiatry, 2010 Jun. PMID 19955111.Differences in endoplasmic-reticulum quality control





determine the cellular response to disease-associated mutants of proteolipid protein. Roboti P, et al. J Cell Sci, 2009 Nov 1. PMID 19825935.