

GLDC Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP9495a**Specification**

GLDC Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P23378](#)**GLDC Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 2731**Other Names**

Glycine dehydrogenase (decarboxylating), mitochondrial, Glycine cleavage system P protein, Glycine decarboxylase, Glycine dehydrogenase (aminomethyl-transferring), GLDC, GCSP

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

GLDC Antibody (N-term) Blocking Peptide - Protein Information**Name** GLDC ([HGNC:4313](#))**Function**

The glycine cleavage system catalyzes the degradation of glycine. The P protein (GLDC) binds the alpha-amino group of glycine through its pyridoxal phosphate cofactor; CO(2) is released and the remaining methylamine moiety is then transferred to the lipoamide cofactor of the H protein (GCSH).

Cellular Location

Mitochondrion.

GLDC Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

GLDC Antibody (N-term) Blocking Peptide - Images

GLDC Antibody (N-term) Blocking Peptide - Background

Degradation of glycine is brought about by the glycine cleavage system, which is composed of four mitochondrial protein components: P protein (a pyridoxal phosphate-dependent glycine decarboxylase), H protein (a lipoic acid-containing protein), T protein (a tetrahydrofolate-requiring enzyme), and L protein (a lipoamide dehydrogenase). The protein is the P protein, which binds to glycine and enables the methylamine group from glycine to be transferred to the T protein. Defects in this gene are a cause of nonketotic hyperglycinemia (NKH).

GLDC Antibody (N-term) Blocking Peptide - References

Chang, C.Y., et al. Acta Paediatr Taiwan 49(1):35-37(2008) Kanno, J., et al. J. Med. Genet. 44 (3), E69 (2007) Kure, S., et al. Hum. Mutat. 27(4):343-352(2006)