

IVD Antibody (N-term) Blocking Peptide
Synthetic peptide
Catalog # BP2974a**Specification**

IVD Antibody (N-term) Blocking Peptide - Product InformationPrimary Accession [P26440](#)**IVD Antibody (N-term) Blocking Peptide - Additional Information****Gene ID** 3712**Other Names**

Isovaleryl-CoA dehydrogenase, mitochondrial, IVD, IVD

Target/Specificity

The synthetic peptide sequence used to generate the antibody [AP2974a](/products/AP2974a) was selected from the N-term region of human IVD. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

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.

IVD Antibody (N-term) Blocking Peptide - Protein Information**Name** IVD ([HGNC:6186](#))**Function**

Catalyzes the conversion of isovaleryl-CoA/3-methylbutanoyl-CoA to 3-methylbut-2-enoyl-CoA as an intermediate step in the leucine (Leu) catabolic pathway (PubMed: [7640268](http://www.uniprot.org/citations/7640268)). To a lesser extent, is also able to catalyze the oxidation of other saturated short-chain acyl-CoA thioesters as pentanoyl-CoA, hexenoyl-CoA and butenoyl-CoA (PubMed: [7640268](http://www.uniprot.org/citations/7640268)).

Cellular Location

Mitochondrion matrix {ECO:0000250|UniProtKB:P12007}

IVD Antibody (N-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

IVD Antibody (N-term) Blocking Peptide - Images

IVD Antibody (N-term) Blocking Peptide - Background

Isovaleryl-CoA dehydrogenase (IVD) is a mitochondrial matrix enzyme that catalyzes the third step in leucine catabolism. The genetic deficiency of IVD results in an accumulation of isovaleric acid, which is toxic to the central nervous system and leads to isovaleric acidemia.

IVD Antibody (N-term) Blocking Peptide - References

Vockley,J., et.al., Am. J. Hum. Genet. 49 (1), 147-157 (1991)Kraus,J.P., et.al., Genomics 1 (3), 264-269 (1987)