10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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

Specification

IVD Antibody (N-term) Blocking Peptide - Product Information

Primary 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 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). 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).

Cellular Location
Mitochondrion matrix {ECO:0000250|UniProtKB:P12007}

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

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)