

IDH3G Antibody (C-term) Blocking Peptide
Synthetic peptide
Catalog # BP9797b**Specification**

IDH3G Antibody (C-term) Blocking Peptide - Product InformationPrimary Accession [P51553](#)**IDH3G Antibody (C-term) Blocking Peptide - Additional Information****Gene ID** 3421**Other Names**

Isocitrate dehydrogenase [NAD] subunit gamma, mitochondrial, Isocitric dehydrogenase subunit gamma, NAD(+)-specific ICDH subunit gamma, IDH3G

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.

IDH3G Antibody (C-term) Blocking Peptide - Protein Information**Name** IDH3G**Function**

Regulatory subunit which plays a role in the allosteric regulation of the enzyme catalyzing the decarboxylation of isocitrate (ICT) into alpha-ketoglutarate. The heterodimer composed of the alpha (IDH3A) and beta (IDH3B) subunits and the heterodimer composed of the alpha (IDH3A) and gamma (IDH3G) subunits, have considerable basal activity but the full activity of the heterotetramer (containing two subunits of IDH3A, one of IDH3B and one of IDH3G) requires the assembly and cooperative function of both heterodimers.

Cellular Location

Mitochondrion.

IDH3G Antibody (C-term) Blocking Peptide - Protocols

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

- [Blocking Peptides](#)

IDH3G Antibody (C-term) Blocking Peptide - Images**IDH3G Antibody (C-term) Blocking Peptide - Background**

Isocitrate dehydrogenases catalyze the oxidative decarboxylation of isocitrate to 2-oxoglutarate. These enzymes belong to two distinct subclasses, one of which utilizes NAD(+) as the electron acceptor and the other NADP(+). Five isocitrate dehydrogenases have been reported: three NAD(+)-dependent isocitrate dehydrogenases, which localize to the mitochondrial matrix, and two NADP(+)-dependent isocitrate dehydrogenases, one of which is mitochondrial and the other predominantly cytosolic. NAD(+)-dependent isocitrate dehydrogenases catalyze the allosterically regulated rate-limiting step of the tricarboxylic acid cycle. Each isozyme is a heterotetramer that is composed of two alpha subunits, one beta subunit, and one gamma subunit. The protein encoded by this gene is the gamma subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. This gene is a candidate gene for periventricular heterotopia.

IDH3G Antibody (C-term) Blocking Peptide - References

Bzymek, K.P., et al. Biochemistry 46(18):5391-5397(2007) Soundar, S., et al. J. Biol. Chem. 281(30):21073-21081(2006) Simpson, J.C., et al. EMBO Rep. 1(3):287-292(2000) Weiss, C., et al. Biochemistry 39(7):1807-1816(2000)