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IDH3G Antibody (C-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP9797b

Specification

IDH3G Antibody (C-term) - Product Information

Application	**WB, FC,E**
Primary Accession	P51553
Other Accession	P41564, Q58CP0
Reactivity	**Human**
Predicted	**Bovine, Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Calculated MW	**42794**
Antigen Region	**366-393**

IDH3G Antibody (C-term) - Additional Information

Gene ID 3421

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

Target/Specificity
This IDH3G antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 366-393 amino acids from the C-terminal region of human IDH3G.

Dilution
WB~~1:1000
FC~~1:10~50
E~~Use at an assay dependent concentration.

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

Storage
Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
IDH3G Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures.

IDH3G Antibody (C-term) - Protein Information

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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.

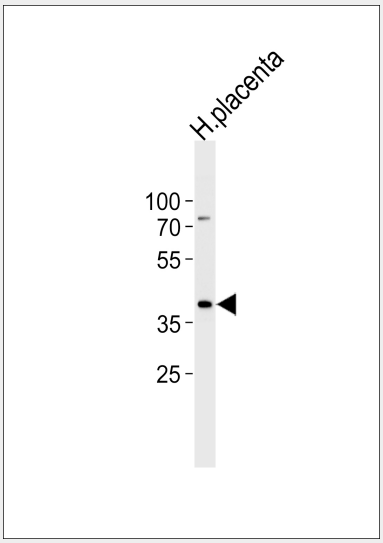
Cellular Location
Mitochondrion.

IDH3G Antibody (C-term) - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

IDH3G Antibody (C-term) - Images



Western blot analysis of lysate from human placenta tissue lysate, using IDH3G Antibody (C-term)(Cat. #AP9797b). AP9797b was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

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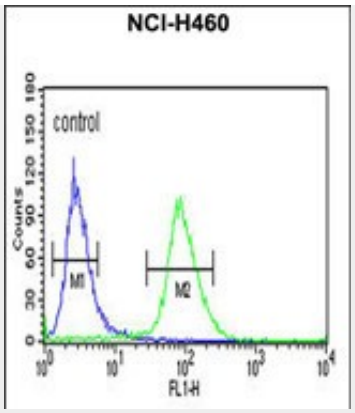

IDH3G Antibody (C-term) (Cat. #AP9797b) flow cytometric analysis of NCI-H460 cells (right histogram) compared to a negative control cell (left histogram).FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

IDH3G Antibody (C-term) - 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) - 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)