



# Mouse anti-Human IDH3B monoclonal antibody, clone 4B21 (CABT-B10443)

This product is for research use only and is not intended for diagnostic use.

## PRODUCT INFORMATION

<b>Immunogen</b>	IDH3B (NP_008830, 296 a.a. ~ 385 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
<b>Isotype</b>	IgG3
<b>Source/Host</b>	Mouse
<b>Species Reactivity</b>	Human
<b>Clone</b>	4B21
<b>Conjugate</b>	Unconjugated
<b>Applications</b>	sELISA, ELISA
<b>Sequence Similarities</b>	YSAEYAVFETGARHPFAQAVGRNIANPTAMLLSASNMLRHLNLEYHSSMIADAVKKVIKV GKVRTRDMGGYSTTTDFIKSVIGHLQTKG*
<b>Format</b>	Liquid
<b>Size</b>	100 µg
<b>Buffer</b>	In 1x PBS, pH 7.2
<b>Storage</b>	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

## BACKGROUND

<b>Introduction</b>	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
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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 beta subunit of one isozyme of NAD(+)-dependent isocitrate dehydrogenase. Three alternatively spliced transcript variants encoding different isoforms have been described for this gene. [provided by RefSeq, Jul 2008]

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**Keywords**

IDH3B; isocitrate dehydrogenase 3 (NAD+) beta; RP46; H-IDHB; isocitrate dehydrogenase [NAD] subunit beta, mitochondrial; NAD+-specific ICDH; NAD(+)-specific ICDH subunit beta; isocitric dehydrogenase subunit beta; NAD+-specific isocitrate dehydrogenase beta; NAD+-specific isocitrate dehydrogenase b subunit; isocitrate dehydrogenase, NAD(+)-specific, mitochondrial, beta subunit;

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## GENE INFORMATION

**Entrez Gene ID**

[3420](#)

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**UniProt ID**

[O43837](#)

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**Pathway**

Citrate cycle (TCA cycle), organism-specific biosystem; Citrate cycle (TCA cycle), conserved biosystem; Citric acid cycle (TCA cycle), organism-specific biosystem; Metabolic pathways, organism-specific biosystem; Pyruvate metabolism and Citric Acid (TCA) cycle, organism-specific biosystem; TCA Cycle, organism-specific biosystem

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**Function**

NAD binding; electron carrier activity; isocitrate dehydrogenase (NAD+) activity; magnesium ion binding; oxidoreductase activity; oxidoreductase activity, acting on the CH-OH group of donors, NAD or NADP as acceptor

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