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Immunotag™ ERAB Polyclonal Antibody

Antibody Specification

Catalog No.	ITT1605
Product Description	Immunotag™ ERAB Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	ERAB
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,IHC-p,ELISA
Recommended Dilution	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat,Monkey
Host Species	Rabbit
Immunogen	Synthesized peptide derived from ERAB, at AA range: 80-160
Specificity	ERAB Polyclonal Antibody detects endogenous levels of ERAB protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	HSD17B10
Accession No.	Q99714 O08756 O70351
Alternate Names	HSD17B10; ERAB; HADH2; MRPP2; SCHAD; XH98G2; 3-hydroxyacyl-CoA dehydrogenase type-2; 17-beta-hydroxysteroid dehydrogenase 10; 17-beta-HSD 10; 3-hydroxy-2-methylbutyryl-CoA dehydrogenase; 3-hydroxyacyl-CoA dehydrogenase type II; Endoplasmic

Antibody Specification

Description	hydroxysteroid 17-beta dehydrogenase 10(HSD17B10) Homo sapiens This gene encodes 3-hydroxyacyl-CoA dehydrogenase type II, a member of the short-chain dehydrogenase/reductase superfamily. The gene product is a mitochondrial protein that catalyzes the oxidation of a wide variety of fatty acids and steroids, and is a subunit of mitochondrial ribonuclease P, which is involved in tRNA maturation. The protein has been implicated in the development of Alzheimer disease, and mutations in the gene are the cause of 17beta-hydroxysteroid dehydrogenase type 10 (HSD10) deficiency. Several alternatively spliced transcript variants have been identified, but the full-length nature of only two transcript variants has been determined. [provided by RefSeq, Aug 2014],
Cell Pathway/ Category	Valine, leucine and isoleucine degradation,Alzheimer's disease,
Protein Expression	Brain,Lung,
Subcellular Localization	cytoplasm,mitochondrion,mitochondrial matrix,plasma membrane,
Protein Function	catalytic activity:(2S,3S)-3-hydroxy-2-methylbutanoyl-CoA + NAD(+) = 2-methylacetoacetyl-CoA + NADH.,catalytic activity:(S)-3-hydroxyacyl-CoA + NAD(+) = 3-oxoacyl-CoA + NADH.,disease:A chromosomal microduplication involving HSD17B10 and HUWE1 is the cause of mental retardation X-linked type 17 (MRX17) [MIM:300705]; also known as mental retardation X-linked type 31 (MRX31). Mental retardation is characterized by significantly sub-average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. In contrast to syndromic or specific X-linked mental retardation which also present with associated physical, neurological and/or psychiatric manifestations, intellectual deficiency is the only primary symptom of non-syndromic X-linked mental retardation.,disease:Defects in HSD17B10 are the cause of 2-methyl-3-hydroxybutyryl-CoA dehydrogenase deficiency (MHBD deficiency) [MIM:300438]. MHBD deficiency leads to neurological abnormalities, including psychomotor retardation, and, in virtually all patients, loss of mental and motor skills.,disease:Defects in HSD17B10 are the cause of mental retardation syndromic X-linked type 10 (MRXS10) [MIM:300220]. MRXS10 is characterized by mild mental retardation, choreoathetosis and abnormal behavior.,function:Functions in mitochondrial tRNA maturation. Part of mitochondrial ribonuclease P, an enzyme composed of MRPP1/RG9MTD1, MRPP2/HSD17B10 and MRPP3/KIAA0391, which cleaves tRNA molecules in their 5'-ends. By interacting with intracellular amyloid-beta, it may contribute to the neuronal dysfunction associated with Alzheimer disease (AD).,similarity:Belongs to the short-chain dehydrogenases/reductases (SDR) family.,subunit:Homotetramer (By similarity). Interacts with MRPP1/RG9MTD1 and MRPP3/KIAA0391.,tissue specificity:Expressed in normal tissues but is overexpressed in neurons affected in AD.,
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