

Immunotag™ ERAB Polyclonal Antibody

| Antibody Specification | |
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| 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

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| 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., |
| Usage | For Research Use Only! Not for diagnostic or therapeutic procedures. |