

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human, mouse, and rat Cysteine Conjugate β -Lyase/CCBL1 in Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	<i>S. frugiperda</i> insect ovarian cell line Sf 21-derived recombinant human Cysteine Conjugate β -Lyase/CCBL1 Thr182-Leu422 Accession # Q16773
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

CCBL1 (Cysteine Conjugate β -Lyase 1; also GTK and KAT-I) is a 90-120 kDa homodimeric member of the Class I Pyridoxyl-phosphate-dependent aminotransferase family of enzymes. It is widely expressed, being found in fibroblasts, renal epithelium, hepatocytes, neurons and astrocytes. CCBL1 has multiple activities, including converting prodrugs into active formulations, generating kynurenic acid from kynurenine, thereby antagonizing NMDA receptors (but not likely presynaptic α 7 AChRs), and blocking the release of proinflammatory cytokines by microglia via GPCR-35 antagonism. Human CCBL1 is 422 amino acids (aa) in length, and contains one aspartate aminotransferase-like region (aa 31-417). There are three potential splice variants, one that shows a deletion of aa 68-117, a second that shows a deletion of aa 251-422, and a third that contains a 21 aa substitution for aa 230-250. While the 422 aa isoform is considered cytosolic, there is the potential for a 34 aa N-terminal extension that would act as a mitochondrial targeting sequence. Such a sequence is reported for rat and nonhuman primate. Over aa 182-422, human CCBL1 shares 82% aa sequence identity with mouse CCBL1.

PRODUCT SPECIFIC NOTICES

This product is provided under an agreement between Life Technologies Corporation and R&D Systems, Inc, and the manufacture, use, sale or import of this product is subject to one or more US patents and corresponding non-US equivalents, owned by Life Technologies Corporation and its affiliates. The purchase of this product conveys to the buyer the non-transferable right to use the purchased amount of the product and components of the product only in research conducted by the buyer (whether the buyer is an academic or for-profit entity). The sale of this product is expressly conditioned on the buyer not using the product or its components (1) in manufacturing; (2) to provide a service, information, or data to an unaffiliated third party for payment; (3) for therapeutic, diagnostic or prophylactic purposes; (4) to resell, sell, or otherwise transfer this product or its components to any third party, or for any other commercial purpose. Life Technologies Corporation will not assert a claim against the buyer of the infringement of the above patents based on the manufacture, use or sale of a commercial product developed in research by the buyer in which this product or its components was employed, provided that neither this product nor any of its components was used in the manufacture of such product. For information on purchasing a license to this product for purposes other than research, contact Life Technologies Corporation, Cell Analysis Business Unit, Business Development, 29851 Willow Creek Road, Eugene, OR 97402, Tel: (541) 465-8300. Fax: (541) 335-0354.