

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Chitotriosidase/CHIT1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, approximately 30% cross-reactivity with recombinant human CHIT1 is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Chitotriosidase/CHIT1 Ala22-Ser464 Accession # Q9D7Q1
Conjugate	Alexa Fluor 594 Excitation Wavelength: 590 nm Emission Wavelength: 617 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.
Immunoprecipitation	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

Chitotriosidase, encoded by the mouse CHIT1 gene, is a typical member of the chitinase family (1). It is distinct from another member known as acidic mammalian chitinase (AMC), encoded by the CHIA gene, in several aspects. AMC/CHIA is expressed mainly in alveolar macrophages and in both the mouse and human gastrointestinal tract (2). CHIT1, however, is expressed exclusively by phagocytes in humans and in the gastrointestinal tract, tongue, fore-stomach, and Paneth cells of the small intestine in mice (2). Both CHIA and CHIT1 are secreted as 50 kDa proteins. In contrast to CHIA, CHIT1 is not stable under acidic pH and can be processed into a C-terminally truncated 39 kDa form (2-4). Human CHIT1 is the best of three biomarkers in the monitoring of Gaucher disease (5). The other two commonly used markers include acid phosphatase and angiotensin-converting enzyme (ACE) (5). Human CHIT1 is also a specific marker of macrophage activation in acute ischemic stroke (6).

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.