

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Chitotriosidase/CHIT1 in direct ELISAs and Western blots. In direct ELISAs and Western blots, no cross-reactivity with recombinant human CHI3-L1 is observed.
Source	Monoclonal Mouse IgG ₃ Clone # 397513
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Chitotriosidase/CHIT1 Ala22-Asn466 Accession # Q13231
Conjugate	Alexa Fluor 405 Excitation Wavelength: 405 nm Emission Wavelength: 421 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

Chitotriosidase encoded by the CHIT1 gene is a member of the chitinase family that is selectively expressed in activated tissue macrophages (1). It is distinct from another member, known as acidic mammalian chitinase (AMC) encoded by the CHIA gene and expressed mainly in the gastrointestinal tract and lung (2). Both CHIA and CHIT1 are secreted as 50 kDa proteins. In contrast to CHIA, CHIT1 is not stable under acidic pHs and can be processed into a C-terminally truncated 39 kDa form (2, 3). CHIT1 is the best biomarker in the monitoring of Gaucher disease among the three most commonly used markers that also include acid phosphatase and angiotensin-converting enzyme (ACE) (4). CHIT1 is also a specific marker of macrophage activation in acute ischemic stroke (5).

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