

DESCRIPTION

Species Reactivity	Human/Rat
Specificity	Detects human IL-32 beta and other IL-32 isoforms in direct ELISAs. In direct ELISAs, 95% cross-reactivity with recombinant human (rh) IL-32 alpha and 45% cross-reactivity with rhIL-32 gamma is detected.
Source	Monoclonal Rabbit IgG Clone # 2525B
Purification	Protein A or G purified from cell culture supernatant
Immunogen	<i>E. coli</i> -derived human IL-32β protein Met1-Lys188 Accession # NP_001012649
Conjugate	Alexa Fluor 488 Excitation Wavelength: 488 nm Emission Wavelength: 515-545 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.
Immunocytochemistry	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

Interleukin 32 (IL-32) is an N-glycosylated cytokine that is upregulated by inflammatory stimulation in monocytes, NK cells, epithelial cells, and pancreatic myofibroblasts (1-5). It cooperates with these stimuli to promote the expression of other proinflammatory molecules such as TNF-α, IL-6, IL-1β, IL-1α, and CXCL8/IL-8 (5-7). The longest of several IL-32 splicing variants is the 20-25 kDa gamma isoform which is also known as natural killer cell transcript 4 (NK4) (8, 9). The alpha isoform (IL-32α) lacks a portion of the putative signal peptide as well as 57 aa from the C-terminal region. IL-32α is less potent than IL-32β, γ, or δ at inducing the expression of proinflammatory molecules in peripheral blood mononuclear cells (PBMC) (8, 10). Neutrophil-derived Proteinase 3 (PR3) cleaves IL-32α between Thr57 and Val58, a cleavage site that is retained in other IL-32 isoforms (11). The N-terminal fragment of PR3-cleaved IL-32α shows increased potency at inducing CXCL2/MIP-2 and CXCL8 expression in PBMC relative to uncleaved IL-32α (11, 12). IL-32 is highly expressed by colonic epithelial cells in inflammatory bowel disease and Crohn's disease, rheumatoid arthritis synovium, and ductal epithelial cells in chronic pancreatitis and pancreatic cancer (5, 13-15). IL-32 inhibits HIV-1 replication *in vitro*, and it is elevated in the serum of HIV-1 patients (16, 17).

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.