Human IL-32 Alexa Fluor® 488-conjugated Antibody

Antigen Affinity-purified Polyclonal Goat IgG
Catalog Number: AF3040G
100 µg

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human IL-32 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	*E. coli*-derived recombinant human IL-32α Cys2-Lys131 Accession # NP_001012651
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.

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

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