

# Product Data Sheet

## Purified anti-human IL-32 $\alpha\beta\delta$

**Catalog # / Size:** 513601 / 50  $\mu$ g  
**Clone:** KU32-56  
**Isotype:** Mouse IgG1,  $\kappa$   
**Immunogen:** Recombinant human IL-32 $\alpha$   
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.  
**Concentration:** 0.5 mg/ml  
**Storage:** The antibody solution should be stored undiluted at 4°C.

## Applications:

**Applications:** ELISA Capture - *Quality tested*  
 WB, IF, IP - *Reported in the literature*

**Recommended Usage:** Each lot of this antibody is quality control tested by ELISA assay. For use as an ELISA capture antibody, a concentration range of 4-6  $\mu$ g/ml is recommended. To obtain a linear standard curve, serial dilutions of human IL-32 recombinant protein ranging from 2000 to 15 pg/ml are recommended for each ELISA plate. It is recommended that the reagent be titrated for optimal performance for each application.

**Application Notes:** **ELISA<sup>1,4</sup> Capture:** The purified KU32-56 antibody is useful as a capture antibody in a sandwich ELISA assay, when used in conjunction with biotinylated KU32-52 antibody as the detection antibody for measuring human IL-32.  
**Additional reported applications (for the relevant formats) include:** Western blotting, immunofluorescence and immunoprecipitation.

**Application References:** 1. Kim KH, *et al.* 2008. *J. Immunol. Methods* 333:38. (ELISA Capture)  
 2. Kulkarni O, *et al.* 2008. *J Pharmacol Exp Ther.* PubMed  
 3. Greene CM, *et al.* 2010. *AM J. Respir Crit Care Med.* 181:31. PubMed  
 4. Sakitani K, *et al.* 2012. *Infect. Immun.* (ELISA Capture) PubMed

**Description:** Interleukin 32 (IL-32), previously known as a transcript (NK4), is produced by mitogen-activated lymphocytes, by IFN $\gamma$ -activated epithelial cells or by IL-12 and IL-18-activated NK cells. Its expression is increased following activation of T-cells by mitogens or the activation of NK cells by IL-2. IL-32 activates NF- $\kappa$ B and p38 MAPK cytokine signal pathways. It has been suggested that IL-32 may play a role in autoimmune and inflammatory diseases such as rheumatoid arthritis. IL-32 is unusual in that it does not share sequence homology with known cytokine families and is highly expressed in immune tissues. IL-32 exists in at least four differentially spliced isoforms ( $\alpha$ ,  $\beta$ ,  $\gamma$  and  $\delta$ ) with predicted molecular weight: ~26 kD. IL-32 $\alpha$  is the shortest and most abundant of four potential splice variants of the pro-inflammatory cytokine IL-32. Potential modifications include myristoylation and N-glycosylation. Transfected IL-32  $\alpha$  was more likely to be cell-associated as compared to IL-32 $\beta$ , suggesting an intracellular function.

**Antigen References:** 1. Kim KH, *et al.* 2008. *J. Immunol. Methods* 333:38.  
 2. Conti P, *et al.* 2007. *Autoimmun. Rev.* 6:131.  
 3. Chen Q, *et al.* 2006. *Vitam Horm.* 74:207.  
 4. Kim SH, *et al.* 2005. *Immunity* 22:131.  
 5. Cagnard N, *et al.* 2005. *Eur. Cytokine Netw.* 16:289.  
 6. Banda NK, *et al.* 2003. *J. Immunol.* 170:2100.



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biollegend.com/ordering#license](http://www.biollegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.