

## DESCRIPTION

|                           |                                                                                                                                                                                                                                                                             |
|---------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Species Reactivity</b> | Mouse                                                                                                                                                                                                                                                                       |
| <b>Specificity</b>        | Detects mouse IL-22BP in direct ELISAs and Western blots. In Western blots, approximately 10% cross-reactivity with recombinant human (rh) IL-22BP is observed and approximately 5% cross-reactivity with rhIL-22 R is observed.                                            |
| <b>Source</b>             | Polyclonal Sheep IgG                                                                                                                                                                                                                                                        |
| <b>Purification</b>       | Antigen Affinity-purified                                                                                                                                                                                                                                                   |
| <b>Immunogen</b>          | Mouse myeloma cell line NS0-derived recombinant mouse IL-22BP<br>Thr19-Pro230 (Asp149Glu)<br>Accession # Q80XF5                                                                                                                                                             |
| <b>Conjugate</b>          | Alexa Fluor 594<br>Excitation Wavelength: 590 nm<br>Emission Wavelength: 617 nm                                                                                                                                                                                             |
| <b>Formulation</b>        | Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide<br><br>*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 22 binding protein (IL-22BP), also known as CRF2-10, CRF2-X, and IL-22 RA2, is a 35-45 kDa secreted glycoprotein belonging to the type II cytokine receptor family (CRF). IL-22 signals through a receptor complex consisting of IL-22 R and IL-10 R $\beta$ . IL-10 R $\beta$  is also a component of the receptor complexes for IL-10, IL-26, IL-28, and IL-29 (1-4). IL-10 R $\beta$  is widely expressed, and other cell types express either IL-10 R $\alpha$  or IL-22 R but not both (5). The mouse IL-22BP cDNA encodes a 230 amino acid (aa) precursor that includes a 20 aa signal sequence and two fibronectin type-III domains (6). Mouse IL-22BP shares 59% and 85% aa sequence identity with human and rat IL-22BP, respectively. Among type II cytokine receptors, IL-22BP is most closely related to the extracellular domain of IL-22 R, sharing 36% aa sequence identity. Splice variants of human IL-22BP exist but have not been detected for the mouse protein (6-8). IL-22BP binds an epitope on IL-22 that is required for the interaction of IL-22 with the transmembrane IL-22 R (8-10), thereby preventing the association of IL-22 R with IL-10 R $\beta$  (10). IL-22BP blocks IL-22-induced responses including induction of MHC class I expression, Stat1 and Stat3 activation, SOCS3 gene expression, the production of reactive oxygen species (6, 9) and the modulation of the proinflammatory effects of IL-22 (11). Mouse IL-22 BP neutralizes both mouse and human IL-22 (6). IL-22BP is secreted by epithelial cells, dendritic cells, activated B cells, and activated monocytes (6, 8, 12, 13).

## 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.