# Data Sheet (Cat.No.TMPY-01220)

TargetMol

## IL-22BP Protein, Human, Recombinant (Isoform 2, His)

### General Information

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| Synonyms: | ZCYTOR16;CRF2X;IL-22R-α-2;interleukin 22 receptor, alpha 2;CRF2-S1;IL-22BP;interleukin 22 receptor, α2;IL-22RA2;IL-22R-alpha-2;CRF2-10 |
| Protein Construction: | A DNA sequence encoding the human IL22RA2 isoform 2 (NP_851826.1) (Met 1-Pro 231) was expressed, fused with a polyhistidine tag at the C-terminus. Predicted N terminal: Thr 22 |
| Species: | Human |
| Expression Host: | HEK293 Cells |
| Accession: | Q969J5-2 |
| Molecular Weight: | 26.1 kDa (predicted); 50-55 kDa (reducing condition, due to glycosylation) |

### QC Testing

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| Biological Activity: | Immobilized IL22BP-His at 10 μg/ml (100 μl/well) can bind biotinylated IL22 , The EC50 of biotinylated IL22 is 1.78-4.14 ng/ml. |
| Purity: | > 95 % as determined by SDS-PAGE |
| Endotoxin: | < 1.0 EU/μg of the protein as determined by the LAL method. |
| Formulation: | Lyophilized from a solution filtered through a 0.22 μm filter, containing PBS, pH 7.4. Typically, a mixture containing 5% to 8% trehalose, mannitol, and 0.01% Tween 80 is incorporated as a protective agent before lyophilization. |

### Preparation and Storage

Reconstitution:

A Certificate of Analysis (CoA) containing reconstitution instructions is included with the products. Please refer to the CoA for detailed information.

Stability & Storage:

It is recommended to store recombinant proteins at -20°C to -80°C for future use. Lyophilized powders can be stably stored for over 12 months, while liquid products can be stored for 6-12 months at -80°C. For reconstituted protein solutions, the solution can be stored at -20°C to -80°C for at least 3 months. Please avoid multiple freeze-thaw cycles and store products in aliquots.

Actual storage temperature shall be subject to the COA.

Shipping:

In general, lyophilized powders are shipped with blue ice, while solutions are shipped with dry ice.

### Protein Background

Interleukin-22 receptor subunit alpha-2 (IL-22RA2), also known as interleukin-22-binding protein (IL-22BP), is a subunit of the receptor for interleukin 22. IL-22BP belongs to the type II cytokine receptor family and contains 3 fibronectin type-III domains. IL-22BP/IL-22RA2 is expressed in a range of tissues, including those in the digestive, female reproductive, and immune systems. It is expressed in the placenta, spleen, breast, skin, and lung. It is also

detected in the intestinal tract, testis, brain, heart, and thymus. The dominant cell types expressing IL-22BP/IL-22RA2 were mononuclear cells and epithelium. IL-22BP/IL-22RA2 may play an important role as an IL-22 antagonist in the regulation of inflammatory responses. Interleukin-22 (IL-22) is a member of the IL-10 family. It is produced by T cells and induces the production of acute-phase reactants. IL-22 plays important role in the immune response through activation of the STAT 3 signal transduction pathway. Two types of IL-22-binding receptors have been discovered, a membrane-bound receptor and a soluble receptor.

Reference

Whittington HA,et al.(2004) Interleukin-22: a potential immunomodulatory molecule in the lung. Am J Respir Cell Mol Biol. 31(2): 220-6.

Dumoutier L,et al.(2001) Cloning and characterization of IL-22 binding protein, a natural antagonist of IL-10-related T cell-derived inducible factor/IL-22. J Immunol. 166(12): 7090-5.

Wei CC,et al.(2003) Cloning and characterization of mouse IL-22 binding protein. Genes Immun. 4(3): 204-11.

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