**DESCRIPTION**

**Species Reactivity**  
Mouse

**Specificity**  
Detects mouse IL-22 in ELISAs and Western blots. In sandwich immunoassays, approximately 75% cross-reactivity with recombinant rat IL-22 is observed and less than 25% cross-reactivity with recombinant human IL-22 is observed.

**Source**  
Polyclonal Goat IgG

**Purification**  
Antigen Affinity-purified

**Immunogen**  
E. coli-derived recombinant mouse IL-22  
Leu34-Val179  
Accession # Q9JJY9

**Endotoxin Level**  
<0.10 EU per 1 μg of the antibody by the LAL method.

**Formulation**  
Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

*Small pack size (SP) is supplied either lyophilized or as a 0.2 μm filtered solution in PBS.

**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.

<table>
<thead>
<tr>
<th>Sample</th>
<th>Concentration</th>
<th>Reagent</th>
<th>Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recombinant Mouse IL-22 (Catalog # 582-ML)</td>
<td>0.1 μg/mL</td>
<td>Recombinant Mouse IL-22 (Catalog # 582-ML)</td>
<td>Mouse IL-22 Antibody (Catalog # AF582)</td>
</tr>
</tbody>
</table>

**Neutralization**  
Measured by its ability to neutralize IL-22-induced IL-10 secretion in the COLO 205 human colorectal adenocarcinoma cell line. Marehalli, L. et al. (2004) Intl. Immunopharmacol. 4:679. The Neutralization Dose (ND₅₀) is typically 0.5-2.5 μg/mL in the presence of 1 ng/mL Recombinant Mouse IL-22.

**DATA**

Neutralization

IL-10 Secretion Induced by IL-22 and Neutralization by Mouse IL-22 Antibody. Recombinant Mouse IL-22 (Catalog # 582-ML) stimulates IL-10 secretion in the COLO 205 human colorectal adenocarcinoma cell line in a dose-dependent manner (orange line), as measured by the Human IL-10 DuoSet ELISA Development Kit (Catalog # DY217B). IL-10 secretion elicited by Recombinant Mouse IL-22 (1 ng/mL) is neutralized (green line) by increasing concentrations of Goat Anti-Mouse IL-22 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF582). The ND₅₀ is typically 0.5-2.5 μg/mL.

**PREPARATION AND STORAGE**

**Reconstitution**  
Reconstitute at 0.2 mg/mL in sterile PBS.

**Shipping**  
The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.  
*Small pack size (SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C.

**Stability & Storage**  
Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  
- 12 months from date of receipt, -20 to -70 °C as supplied.  
- 1 month, 2 to 8 °C under sterile conditions after reconstitution.  
- 6 months, -20 to -70 °C under sterile conditions after reconstitution.

Rev. 2/6/2018 Page 1 of 2
Interleukin-22 (IL-22), also known as IL-10-related T cell-derived inducible factor (IL-TIF) was initially identified as a gene induced by IL-9 in mouse T cells and mast cells. Mouse IL-22 cDNA encodes a 179 amino acid (aa) residue protein with a putative 33 aa signal peptide that is cleaved to generate a 147 aa mature protein that shares approximately 79% and 22% aa sequence identity with human IL-22 and IL-10, respectively. The mouse IL-22 gene is localized to chromosome 10. Although it exists as a single copy gene in many mouse strains, the IL-22 gene is duplicated in some mouse strains including C57B1/6, FVB and 129. The two mouse genes designated IL-TIFα and IL-TIFβ, share greater than 98% sequence homology in their coding region. IL-22 has been shown to activate STAT1 and STAT3 in several hepatoma cell lines and upregulate the production of acute phase proteins. IL-22 is produced by normal mouse T cells upon Con A activation. Mouse IL-22 expression is also induced in various organs upon lipopolysaccharide injection, suggesting that IL-22 may be involved in inflammatory responses. The functional IL-22 receptor complex consists of two receptor subunits, IL-22 R (previously an orphan receptor named CRF2-9) and IL-10 Rβ (previously known as CRF2-4), belonging to the class II cytokine receptor family.