

DESCRIPTION

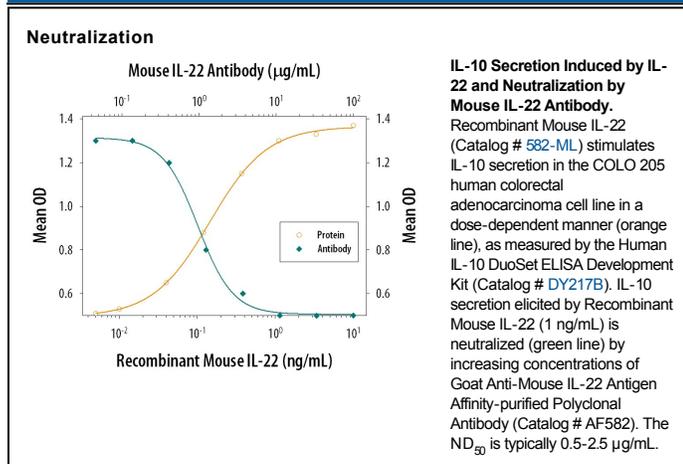
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|---------------------------|---|
| Species Reactivity | Mouse |
| Specificity | Detects mouse IL-22 in ELISAs and Western blots. In sandwich immunoassays, approximately 75% cross-reactivity with recombinant rat IL-22 is observed and less than 25% cross-reactivity with recombinant human IL-22 is observed. |
| Source | Polyclonal Goat IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -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 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.

| | Recommended Concentration | Sample |
|---|----------------------------------|---|
| Western Blot | 0.1 µg/mL | Recombinant Mouse IL-22 (Catalog # 582-ML) |
| Mouse IL-22 Sandwich Immunoassay | | Reagent |
| ELISA Capture | 1-4 µg/mL | Mouse IL-22 Antibody (Catalog # AF582) |
| ELISA Detection | 0.2-0.8 µg/mL | Mouse IL-22 Biotinylated Antibody (Catalog # BAF582) |
| Standard | | Recombinant Mouse IL-22 (Catalog # 582-ML) |
| Neutralization | | Measured by its ability to neutralize IL-22-induced IL-10 secretion in the COLO 205 human colorectal adenocarcinoma cell line. Marehalli, L. <i>et al.</i> (2004) <i>Intl. Immunopharmacol.</i> 4:679. The Neutralization Dose (ND ₅₀) is typically 0.5-2.5 µg/mL in the presence of 1 ng/mL Recombinant Mouse IL-22. |

DATA



PREPARATION AND STORAGE

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|--------------------------------|--|
| 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. <ul style="list-style-type: none"> • 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. |

BACKGROUND

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-TIF α and IL-TIF β , 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 R β (previously known as CRF2-4), belonging to the class II cytokine receptor family.