

Recombinant Rat Interleukin-22

#R00312

Size: 10 µg/100 µg/500 µg

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.

- 3 months, -20 to -70 °C under sterile conditions after reconstitution.



Warning: This product is intended for scientific research only. It is not to be used for medical or diagnostic procedures in humans or animals, nor as a food, cosmetic, or household product.

Background

IL-22 is belonging to IL-10 family of regulatory cytokines which includes IL-10, IL-19, IL-20, IL-22, IL-24 and IL-26. Members of this family share partial homology in their amino acid sequences, but they are dissimilar in their biological functions. Produced by T lymphocytes and dendritic cells, IL-10 contributes to the inflammatory response in vivo. IL-22 signals through CRF2-4 and IL-22. It along with IL-17 is rapidly produced by splenic LTi-like cells and can be also produced by Th17 cells and likely plays a role in the coordinated response of both adaptive and innate immune systems. Recombinant rat Interleukin-22 contains 146 amino acids and it has approximately 79 % and 92 % amino acid sequence identity with human and murine IL-22.

AA Sequence

LPINSQCKLEAANFQQPYIVNRTFMLAKEASLADNNT
DVRLIGEELFRGVKAKDQCYLKQVLNFTLEDVLLPQ

SDRFQPYMQEVVPFLTSLSIHLSPCHISGDDQNIQKN
VRQLKETVQKLGESGEIKAIGELDLLFMSLRNACV

Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Reconstitute in sterile distilled water or aqueous buffer containing 0.1 % BSA to a concentration of 0.1-1.0 mg/ml. Stock solutions should be apportioned into working aliquots and stored at ≤ -20 °C. Further dilutions should be made in appropriate buffered solutions.

Product Specification

Synonyms	Cytokine Zcyto 18, TIF
Accession	Q198B4
Unigene	Rn.195879.
Species	Rat
Source	Escherichia coli.
Molecular Weight	Approximately 16.6 kDa, a single non-glycosylated polypeptide chain containing 146 amino acids.
Purity	> 97 % by SDS-PAGE and HPLC analyses.
Biological Activity	Fully biologically active when compared to standard. The ED ₅₀ as determined by inducing IL-10 secretion of human COLO 205 cells is less than 0.5 ng/ml, corresponding to a specific activity of > 2.0 × 10 ⁶ IU/mg.

Physical	Sterile Filtered White lyophilized
Appearance	(freeze-dried) powder.
Formulation	Lyophilized from a 0.2 µm filtered concentrated solution in PBS, pH 7.4.
Endotoxin	Less than 1 EU/µg of rRtIL-22 as determined by LAL method.