

TECHNICAL DATA SHEET

Recombinant Human IL-1Ra (Carrier-free)

Catalog Number: 21-7070

RPx-Pro™ Recombinant Protein

PRODUCT INFORMATION

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Recombinant Human IL-1Ra (Carrier-free)

DESCRIPTION

Interleukin-1 receptor antagonist (IL-1RA) is a member of the IL-1 cytokine family of secreted proteins. It inhibits the activity of IL-1 α and IL-1 β by competitively blocking their binding to type I and type II receptors. IL-1Ra is produced by corneal epithelial cells, monocytes, neutrophils, macrophages, and fibroblasts.

MOLECULAR MASS

Recombinant human IL-1Ra is a 17.2 kDa protein consisting of 153 amino acid residues.

AMINO ACID SEQUENCE

MRPSGRKSSK MQAFRIWDVN QKTFYLRNNQ LVAGYLQGN VNLEEKIDVV PIEPHALFLG IHGGKMCLSC VKSGDETRLQ
LEAVNITDLS ENRKQDKRFA FIRSDSGPTT SFESAACPGW FLCTAMEADQ PVSLTNMPDE GVMVTKFYFQ EDE

SOURCE

E. coli

APPLICATIONS

Bioassay

PURITY

98 %

STORAGE

-20°C

PROTEIN CONTENT

Content Verified by UV Spectroscopy and/or SDS-PAGE

ENDOTOXIN LEVEL

Endotoxin level is <0.1 ng/ μ g of protein (<1 EU/ μ g).

AUTHENTICITY

Verified by N-terminal and Mass Spectrometry analyses (when applicable).

CROSS REACTIVITY

Frog, Mouse, Rat

BIOACTIVITY

Determined by its ability to inhibit the IL-1 alpha stimulation of murine D10S cell. The expected ED₅₀ is 20-40 ng/ml in the presence of 50 pg/ml of IL-1 alpha.

RESEARCH AREAS

Diabetes / Weight Regulation; Inflammation; Neurobiology

RECONSTITUTION

See Certificate of Analysis (COA) for lot specific reconstitution information.

REFERENCES

Arend WP. 2002. Cytokine Growth Factor Rev. 13(4-5): 323-340. Hannum CH, Wilcox CJ, Arend WP, Joslin FG, Dripps DJ, Heimdal PL, Armes LG, Sommer A, Eisenbert SP and Thompson RC. 1990. Nature. 343(256): 336-340. Garlanda C, Dinarello CA and Mantovani A. 2013. Immunity. 39(6): 1003-1018. van de Veerdonk FL and Netea MG. 2013. Front Immunol. 2013. 4: 167.

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