Revision 3

#61135 Store at -20C

Human IL-33 Recombinant Protein

10 µg

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MW (kDa):	UniProt ID:	Entrez-Gene Id:
18	#O95760	90865

Background

IL-33 (Interleukin-33, NF-HEV) is a nuclear cytokine that is part of the IL-1 family (1,2). Originally discovered as the 'nuclear factor from high endothelial venules,' it is widely expressed by endothelial cells as well as epithelial barrier tissues (1,5). IL-33 is involved in regulating type 2-associated innate immune responses (2,4). It is the ligand for ST2 which, along with IL-1RAcP, forms the IL-33R signaling complex (2,3). IL-33 functions as an alarmin upon cellular damage or stress, and is associated with allergic inflammation and asthma (5,6).

Endotoxin

Endotoxin levels are less than or equal to 1 EU / 1 µg hIL-33.

Purity

A greater than or equal to 95% purity was determined by SDS-PAGE.

Source / Purification

Recombinant human IL-33 was expressed in *E. coli* and is supplied in a lyophilized form.

Bioactivity

The bioactivity of recombinant hIL-33 was determined in a D10S cell proliferation assay. The ED_{50} of each lot is less than or equal to 500 pg/ml.

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Background References

1. Baekkevold, E.S. et al. (2003) *Am J Pathol* 163, 69-79.
2. Schmitz, J. et al. (2005) *Immunity* 23, 479-90.
3. Chackerian, A.A. et al. (2007) *J Immunol* 179, 2551-5.
4. Smithgall, M.D. et al. (2008) *Int Immunol* 20, 1019-30.
5. Moussion, C. et al. (2008) *PLoS One* 3, e3331.
6. Cayrol, C. and Girard, J.P. (2014) *Curr Opin Immunol* 31, 31-7.

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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