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Human Interleukin-29 (hIL-29)



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3 Trask Lane | Danvers | Massachusetts | 01923 | USA

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MW (kDa):

UniProt ID: #Q8IU54 Entrez-Gene Id: 282618

Background

IL-29 is a member of the IFN λ family of cytokines and shares many functions with the type I family of interferons (1,2). IL-29 is produced by monocytes and dendritic cells in response to viral infection and stimulation with toll-like receptor ligands (1-3). IL-29 is a potent antiviral cytokine. The antiviral activities of IL-29 include the upregulation of MHC Class I expression on the cell surface, and the expression of PKR, MxA, and 2', 5'-OAS (1,2). The IL-29 receptor consists of IL-28R α and IL-10R β is expressed on most non-hematopoietic cells (3). IL-29 binding induces the phosphorylation of Stats 1, 2 and 3 (1,3).

Endotoxin

Less than 0.01 ng endotoxin/1µg hIL-29.

Purity

>98% as determined by SDS-PAGE of 6 μ g reduced (+) and non-reduced (-) recombinant hIL-29. All lots are greater than 98% pure.

Source / Purification

Recombinant human IL-29 (hIL-29) Gly20-Thr200 (Accession #NP_742152) was expressed in human 293 cells at Cell Signaling Technology.

Bioactivity

The bioactivity of hIL-29 was determined in a virus protection assay. The ED_{50} of each lot is between 0.40-1.45 ng/ml.

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Background References

- 1. Kotenko, S.V. et al. (2003) Nat Immunol 4, 69-77.
- 2. Sheppard, P. et al. (2003) Nat Immunol 4, 63-8.
- 3. Donnelly, R.P. et al. (2004) J Leukoc Biol 76, 314-21.

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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