

## IL 29 Human, HEK

**Description:** IL-29 Human Recombinant produced in HEK cells is a glycosylated monomer, having a molecular weight range of 29-35kDa due to glycosylation. The IL-29 is purified by proprietary chromatographic techniques.

**Synonyms:** Interleukin-29, IL-29, IFN-Lambda 1, Interferon-Lambda 1, Cytokine ZCYTO21, IL29, IFNL1, ZCYTO21.

**Source:** HEK.

**Physical Appearance:** Sterile Filtered White lyophilized (freeze-dried) powder.

**Purity:** Greater than 95% as observed by SDS-PAGE.

**Formulation:**

The IL29 was lyophilized from 1mg/ml in 1xPBS.

**Stability:**

Lyophilized IL-29 although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution IL29 should be stored at 4°C between 2-7 days and for future use below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

**Usage:**

NeoBiolabs products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

**Solubility:**

It is recommended to reconstitute the lyophilized IL-29 in sterile water not less than 100

**Introduction:**

IL-29 is distantly related to type I interferons and the IL-10 family. Expression of IL-29 is induced by viral infection which interacts with a heterodimeric class II cytokine receptor that consists of interleukin 10 receptor, beta (IL10RB) and interleukin 28 receptor, alpha. IL-29 exhibits common features with type I IFNs such as antiviral activity, antiproliferative activity and in vivo antitumour activity. IL-29 acts similarly to IFNs, but is less effective generally and has activity in a more limited range of cell lines. IFN-ambda 1, IFN-lambda 2 and IFN-lambda3 are closely positioned genes on human chromosome 19. IL-29 induces ELR(-) CXC chemokine mRNA in human peripheral blood mononuclear cells, in an IFN-gamma-independent manner. IL-29 is able to generate tolerogenic DCs, an activity that could thwart IFN-beta functions. IL-29 produced in response to viral infection, activates both monocytes and macrophages producing a restricted panel of cytokines and therefore is an important factor in activating innate immune responses at the site of viral infection. IFN-Lambda 1 antiviral and antiproliferative activity requires Interferon-Lambda 2 receptor tyrosine residues.

**Biological Activity:**

The specific activity was determined by the dose dependent protection of the cytopathic effect on A549 cells (human lung adenocarcinoma epithelial cell line) that were challenged with encephalomyocarditis (EMC) virus and is typically 0.5-5ng/ml.

Catalog #:CYPs-124

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