

Recombinant Human IL-13 Variant
Catalog # PBG10193**Specification**

Recombinant Human IL-13 Variant - Product Information**Recombinant Human IL-13 Variant - Additional Information****Description**

IL-13 is an immunoregulatory cytokine produced primarily by activated Th2 cells, and also by mast cells and NK cells. Targeted deletion of IL-13 in mice resulted in impaired Th2 cell development and indicated an important role for IL-13 in the expulsion of gastrointestinal parasites. IL-13 exerts anti-inflammatory effects on monocytes and macrophages and it inhibits the expression of inflammatory cytokines such as IL-1 β , TNF- α , IL-6 and IL-8. IL-13 has also been shown to enhance B cell proliferation and to induce isotype switching resulting in increased production of IgE. Blocking of IL-13 activity inhibits the pathophysiology of asthma. Human and murine IL-13 is cross-species reactive. A variant of IL-13 shows enhanced functional activity compared with the wild type IL-13. PeproTech's genetic variant, termed human IL-13 analog, is a mature 114 amino acid protein with a substitution of Q for R at position 112.

Biological Activity

This IL-13 analog shows a two fold increase, relative to wild type IL-13, in bioactivity as measured by the *in-vitro* dose dependent activation of STAT6 and IL-13 dependent gene induction in transfected A201.1 cells. This analog has also been shown to exhibit increased *in vivo* activity compared to wild type IL-13, as measured by the induction of airway hyper-responsiveness.

Authenticity

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

Endotoxin

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

Protein Content

Verified by UV Spectroscopy and/or SDS-PAGE gel.

Storage

-20°C

Precautions

Recombinant Human IL-13 Variant is for research use only and not for use in diagnostic or therapeutic procedures.

Recombinant Human IL-13 Variant - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)

- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Recombinant Human IL-13 Variant - Images