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Datasheet for ABIN2666664
IL-34 Protein (AA 1-235)

Overview

Quantity:	10 µg
Target:	IL-34 (IL34)
Protein Characteristics:	AA 1-235
Origin:	Mouse
Source:	CHO Cells
Protein Type:	Recombinant
Biological Activity:	Active
Application:	Western Blotting (WB), ELISA, Flow Cytometry (FACS), Immunohistochemistry (IHC)

Product Details

Purity:	> 98 % , as determined by Coomassie stained SDS-PAGE.
Sterility:	0.22 µm filtered
Endotoxin Level:	Less than 0.01 ng per µg cytokine as determined by the LAL method.

Target Details

Target:	IL-34 (IL34)
Alternative Name:	IL-34 (IL34 Products)
Background:	Mouse IL-34 shares a sequence identity of 71 % with human IL-34 on the amino acid level, and the IL-34 gene is syntenic in the human, chimpanzee, rat, and mouse genomes. IL-34 has no apparent consensus structural domain or motif and does not share sequence homology with M-CSF, nevertheless, it binds to the CSFR. These two cytokines are not identical in biological

Target Details

activity and signal activation. IL-34 and CSF show an equivalent ability to support cell growth or survival. However, these cytokines have different ability to induce the production of chemokines (MCP-1 and eotaxin-2) in primary macrophages, the morphological change in TF-1-fms cells, and the migration of J774A.1 cells. The use of monoclonal antibodies against the CSFR suggests a differential domain binding in the receptor to IL-34 and CSF. As a result, different bioactivities and signal activation kinetics/strength are produced for these cytokines.

Molecular Weight: The 215 amino acid recombinant protein has a predicted molecular mass of 26 kDa. The DTT-reduced protein migrates at approximately 39 kDa and the non-reduced protein with slightly greater mobility by SDS-PAGE.

Pathways: [RTK Signaling](#)

Application Details

Application Notes: Optimal working dilution should be determined by the investigator.

Comment: Biological activity: ED50 =10 - 50 ng/ml, corresponding to a specific activity of 0.2 - 1 x 10⁵ units/mg, as determined by M-NFS-60 cell proliferation induction in a dose dependent manner.

Restrictions: For Research Use only

Handling

Format: Liquid

Reconstitution: For maximum results, quick spin vial prior to opening. The protein can be aliquoted and stored from -20 °C to -70 °C. Stock solutions can also be prepared at 50-100 µg/mL in sterile buffer (PBS, HPBS, DPBS, or EBSS) containing carrier protein such as 0.2-1 % BSA or HSA and stored in working aliquots at -20 °C to -70 °C.

Buffer: 0.22 µm filtered protein solution is in 10 mM NaH₂PO₄, 0.5 M NaCl, pH 7.4

Handling Advice: Avoid repeated freeze/thaw cycles.

Storage: -20 °C

Storage Comment: Unopened vial can be stored between 2°C and 8°C for one month, at -20°C for six months, or at -70°C for one year.