

Recombinant Murine Interleukin-33 (rm IL-33 / IL1F11)

Interleukin-33 is a 32kDa proinflammatory cytokine that may also regulate gene transcription in producer cells. IL-33 is structurally related to IL-1 which induces helper T cells to produce type 2 cytokines and acts through the receptor IL1RL-1 (IL1 receptor-like-1) which is also known also as ST2. Binding of IL-33 to this receptor activates NF-kappa-B and MAP kinases and induces in vitro Th2 cells to produce cytokines. In vivo, IL-33 induces expression of IL-4, IL-5, IL-13 and leads to severe pathological changes in mucosal organs and in vitro, it can be divided to N-terminal fragment of 12kDa and C-terminal fragment of 18kDa by cleavage of caspase-1.

Recombinant mouse IL-33 produced in E.Coli is a single, non-glycosylated polypeptide chain containing 158 amino acids and having a molecular mass of 17.5 kDa.

Synonyms : Interleukin-1 family member 11 (IL1F11), Nuclear factor from high endothelial venules (NF-HEV), DVS27, NKHEV

Source: *Escherichia coli*

AA Sequence: SIQGTSLLTQSPASLSTYND QSVSFVLENGCYVINVDDSG
KDQEQDQVLLRYYESPCPAS QSGDGVGKMLMVNMSPKID
TDIWLHANDKDYSVELQRGD VSPPEQAFFVLHKKSSDFVS
FECKNLPGTYIGVKDNQLAL VEEKDESCNNIMFKLSKI

Formulation: Lyophilized from a sterile 0.2 µm filtered solution in PBS, 2 mM Mercaptoethanol

Reconstitution: Reconstitute in sterile endotoxin free water not less than 100 µg/ml

Stability: The lyophilized protein is stable for at least 2 years at -20°C. Reconstituted rm IL-33 is stable for at least 3 months when stored in concentrated working aliquots (100 ng/µl or higher) at -20°C. Avoid repeated freeze/thaw cycles.

Biological Activity: The ED₅₀ as determined by the dose-dependent stimulation of the proliferation of murine D10S cells is ≤ 0.5ng/ml, corresponding to a specific activity of 2×10⁶ units/mg.

Purity: > 95 % (verified by SDS-PAGE / silver stain)

Endotoxicity: The endotoxin level is less than 0.1 ng per µg (1EU/µg) determined by LAL method

Order N°: rm IL-33+Size
available sizes: 2 µg, 10 µg, 50 µg

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