

## 32-8658: Recombinant Mouse IL-12 Receptor Subunit beta2/IL-12RB2 (C-Fc)

**Gene :** Il12rb2  
**Gene ID :** 16162  
**Uniprot ID :** P97378

### Description

Source: Human Cells.  
MW :98.4kD.

Recombinant Mouse IL-12 receptor beta 2 is produced by our Mammalian expression system and the target gene encoding Met1-Asn637 is expressed with a Fc tag at the C-terminus. The IL12 receptor complex, formed by IL12RB1 and IL12RB2, mediates the type I immune responses of various types of lymphocytes. Its ligand, IL12, is a heterodimeric cytokine composed of IL-12p35 and IL-12p40 subunits that are linked via disulfide bonds. Ligation of IL-12 to its receptor involves the binding of IL-12p35 to IL12RB1 and IL-12p40 to IL12RB2. This will result in the activation of tyrosine kinase 2 (TYK2), which is associated with the IL12RB1 chain and Janus kinase 2 (JAK2), which is associated with the IL12RB2 chain. Activated TYK2 and JAK2 direct the phosphorylation of STAT4. IL12RB1 is present on all lymphocytes, while the expression of IL12RB2 is tightly regulated. It has shown that the expression of IL12RB2 is limited to Th2 cells. IL12RB2 subunit plays an important role in Th1 cell differentiation, since its absence leads to an abortive Th1 differentiation that has dysfunctional production of Th1 effector molecules.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of PBS, pH 7.4.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** MAQTVRECSLALLFLFMWLLIKANIDVCKLGTVTVPAPVIPLGSAANISCSLNPQKGC SHYSSNELILLKFVND VLVENLHGKKVHDHTGHSSTFQVTNLSLGMTL FVCKLNCNSQKPPVPVCGVEISVGVAPEPPQNISCVQEG ENGTVACSWNSGKVTYLKTNYTLQLSGPNNLTCQKQCFSDNRQNCNRLDLGINLSPDLAESRFIVRVTAINDLG NSSSLPHTFTFLDIVIPLPPWDIRINFLNASGSRGTLQWEDEGQVVLNQLRYQPLNSTSWNMVNATNAKGKYDL RDLRPFTEYEFQISSKLHLSGGSWSNWSESLRTRTPEEPPVGLDIWYMKQDIDYDRQQISLFWKSLNPSEARG KILHYQVTLQEVTKKTTLQNTTRHTSWTRVIPRTGAWTASVSAANSK GASAPTHINIVDLCGTGLLAPHQVSAK SENMDNILVTWQPPKADS AVREYIVEWRALQPGSITKFP PHWLRIPPDNMSALISENIKPYICYEIRVHALSESQ GGCSSIRGDSKHKAPVSGPHITAITEKKERLFI SWTHIPFPEQRGCILHYRIYWKERDSTAQPELCEIQYRRSQNS HPISSLQPRVTVLWMTAVTAAGESPQGNEREFCPQ GKANVDDIEGRMDEPKSCDKTHTCPPCPAPPELLGGPS VFLFPPKPKDTLMISRTPEVTCVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQD WLNGKEYKCKVSNKALPAPIEKTISKAKGQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQ PENNYKTTTPVLDSDGSFFLYSKLTVDKSRWQQGNV FSCSVMHEALHNHYTQKSLSLSPGK

### Application Note

**Endotoxin :** Less than 0.1 ng/µg (1 IEU/µg) as determined by LAL test.