The human IL-3, IL-5 and GM-CSF receptors are each composed of both unique \( \alpha \) subunits and a common \( \beta \) subunit. The \( \alpha \) subunits are low-affinity ligand binding proteins while the \( \beta \) subunits do not themselves bind ligand, but are required for high-affinity binding by the \( \alpha \) subunits. In contrast, the mouse IL-3 receptor has two distinct \( \beta \) subunits, one that functions only in IL-3-mediated cell signaling and a second that is shared with IL-5 and GM-CSF. The murine \( \beta \) subunits are 91% homologous at the amino acid level but only 56% homologous to the human \( \beta \) subunit. Although neither the murine nor the human \( \beta \) subunit contains tyrosine kinase domains, both activate tyrosine phosphorylation-mediated signaling pathways.

**REFERENCES**


2. Tavernier, J., et al. 1992. A human high affinity interleukin-5 receptor (IL-5R) is composed of an IL-5 specific chain and a \( \beta \) chain shared with the receptor for GM-CSF. Cell 66: 1175-1184.


**CHROMOSOMAL LOCATION**

Genetic locus: CSF2RA (human) mapping to Xp22.33/Yp11.32; Csf2ra (mouse) mapping to 19 D3.

**SOURCE**

GM-CSFR\( \alpha \) (8G6 BOT) is a mouse monoclonal antibody raised against GM-CSFR\( \alpha \) of human origin.

**PRODUCT**

Each vial contains 200 µg IgG\( \kappa \) kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**RESEARCH USE**

For research use only, not for use in diagnostic procedures.