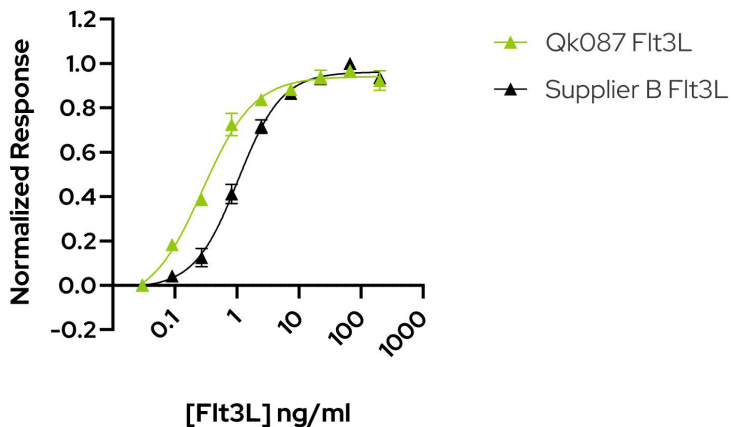


Flt3L is more bioactive than an alternative supplier



Quantitative luciferase reporter assay shows Qkine Flt3L (Qk087, green) has a higher bioactivity with an EC50 of 0.3 ng/ml (0.017 nM) compared to alternative Flt3L (Supplier B, black) with an EC50 of 1 ng/ml (0.057 nM). Data for Qk087 lot #204566.

TNQK087-301123-v1.1

Introduction:

Fms-like tyrosine kinase 3 ligand (Flt-3 Ligand or Flt3L) is a cytokine that stimulates the survival, proliferation, and differentiation of various early myeloid and lymphoid progenitor cells. Flt3L is commonly used in cell culture for the differentiation of hematopoietic stem cells into dendritic cells.

It is crucial to use reliable, high-quality recombinant proteins to optimize the growth and differentiation of cells and maintain cellular integrity and phenotype. Animal-free growth factors are preferable as they have higher lot-to-lot consistency and eliminate contamination from animal-derived components. This technote demonstrates that Qkine animal-free Flt3L is more bioactive than bacterial-expressed Flt3L from a major alternative supplier (Supplier B).

Method:

The bioactivity of Qk087 Flt3L and bacterial-expressed Flt3L reference standard was determined using a cell proliferation study by SBH Sciences. AML-5, human myeloid cells, were treated in triplicate with a serial dilution of Flt3L for 68.5 hours and the number of viable cells was measured.

Results:

The bioactivity comparison demonstrates that Qk087 Flt3L has a higher bioactivity than Flt3L from an alternative major supplier. Qkine Flt3L provides a reliable source of highly pure animal-free Flt3L for the reproducible culture of myeloid progenitors and dendritic cells.

Qkine Flt3L and all Qkine recombinant proteins come with a Bioactivity Guarantee, guaranteeing our proteins to be reproducibly bioactive in your cultures. To learn more or to purchase Qkine animal-free recombinant proteins, visit qkine.com