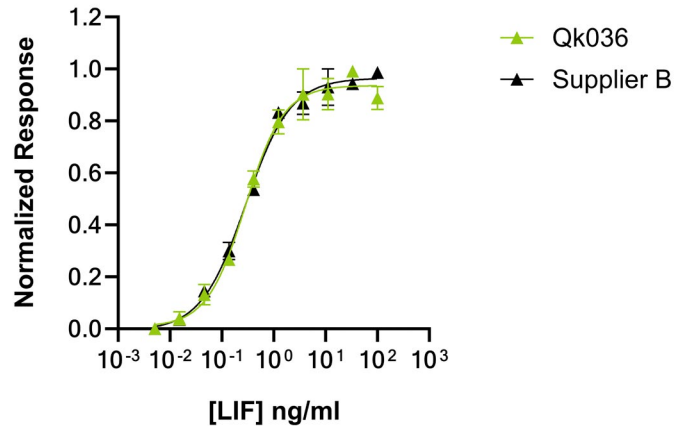


# Qkine Leukemia Inhibitory Factor (LIF) is as biologically active as a comparable alternative supplier protein

Technote

LIF (Qk036)



## Quantitative luciferase reporter assay shows equivalent bioactivity of Qkine LIF (Qk036, green) and alternative supplier LIF (Supplier B black).

HEK293T reporter cells were treated in triplicate with a serial dilution of LIF for 24 hours. Firefly luciferase activity is measured and normalized to control Renilla luciferase activity.

Leukemia Inhibitory Factor (LIF) belongs to the IL-6 cytokine family and regulates embryonic development, immune response, and inflammation. LIF is essential to maintain stem cell pluripotency, so it is widely used in embryonic and induced pluripotent stem cell cultures. LIF can also differentiate and maintain immune cells, such as T cells and macrophages.

Qkine LIF (Qk036) is animal origin-free, carrier protein-free and tag-free to ensure high and consistent bioactivity.

### Qkine LIF (Qk036) Bioactivity

- ▶ Qkine LIF stimulated the HEK293T luciferase reporter assay with an EC50 of 0.28 ng/ml (16 pM).
- ▶ This was comparable to Supplier B LIF bioactivity of 0.29 ng/ml (17 pM).

The bioactivity comparison demonstrates that Qkine LIF (Qk036) has equivalent bioactivity to LIF from an alternative major supplier. Qkine LIF (Qk036) has the advantage of being highly pure and animal origin-free, giving lot-lot consistency in bioactivity for long-term reproducible culture of stem and immune cells.