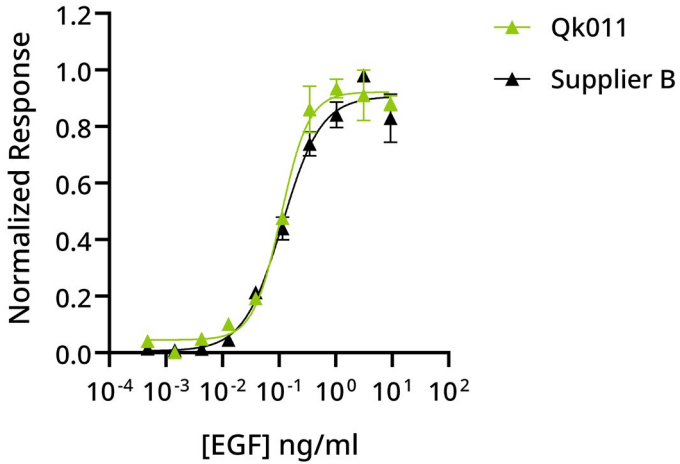
Qkine human Epidermal Growth Factor is as biologically active as a comparable alternative supplier protein

Technote

EGF (Qk011)



Quantitative luciferase reporter assay shows equivalent bioactivity of Qkine EGF (Qk011, green) and alternative supplier EGF (Supplier B black).
HEK293T reporter cells were treated in triplicate with a serial dilution of EGF for 3 hours. Firefly luciferase activity is measured and normalized to control Renilla luciferase activity.

Epidermal growth factor (EGF) is involved in the regulation of cell growth and proliferation through the tyrosine kinase receptor EGFR. EGF and the EGFR have been linked to many human diseases, including inflammatory diseases and multiple cancers.

EGF is an essential growth factor for stimulating the proliferation of induced pluripotent stem cells (iPSC) and embryonic stem cells (ESC) and their subsequent differentiation. EGF is also a key component of many media for developing and maintaining organoids. Qkine EGF (Qk011) is animal origin-free, carrier protein-free and tag-free to ensure high and consistent bioactivity.

Qkine EGF (Qk011) Bioactivity

- Qkine EGF (Qk011) was bioactive in a quantitative luciferase assay with EC50 of 0.11 ng/ml (17.6 pM).
- This was equivalent to EGF from an alternative supplier, which also had an EC50 of 0.11 ng/ml (17.6 pM).

The bioactivity comparison demonstrates that Qkine EGF (Qk011) has equivalent bioactivity to EGF from an alternative major supplier. Qkine EGF (Qk011) has the advantage of being highly pure and animal origin-free, giving lot-lot consistency in bioactivity for long-term reproducible culture of stem cells and organoids.