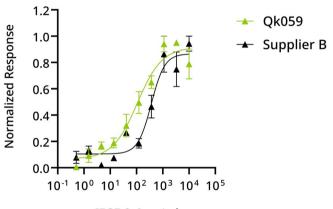
# Qkine animal origin-free Fibroblast Growth Factor 8a is more biologically active than a mammalian-origin comparable protein

## Technote

### FGF-8a (Qk059)



[FGF-8a] ng/ml

## Qkine AOF FGF-8a (Qk059, green) has higher bioactivity compared to mammalian-expressed FGF-8a (Supplier B, black).

Bioactivity was determined using the Promega serum response element luciferase reporter assay in HEK293T cells. Cells were treated in triplicate with a serial dilution of FGF-8a in the presence of 10 µg/ml heparin for 3 hours.

Fibroblast growth factor 8a (FGF-8a) is a spliced form of FGF-8, a member of the FGF family. FGFs regulate many developmental and cellular processes including proliferation, survival, angiogenesis and tumorigenesis. FGF-8a plays a crucial role in regulating embryonic development and is involved in the proliferation, differentiation, and migration of induced pluripotent stem cells (iPSC), embryonic stem cells (ESC), and neural stem cells (NSC).

Qkine FGF-8a (Qk059) is animal origin-free (AOF), carrier protein-free and tag-free to ensure high and consistent bioactivity.

#### Qkine FGF-8a (Qk059) Bioactivity

- Qkine FGF-8a (Qk059) was determined to be bioactive using a luciferase reporter assay in HEK293T cells with an EC50 of 108.1 ng/ml (5 nM).
- Qkine AOF FGF-8a was 5-fold more potent than a mammalian expressed FGF-8a from an alternative supplier, which had an EC50 of 567 ng/ml (27 nM).

The comparative bioactivity data demonstrates that Qkine FGF-8a (Qk059) has equivalent bioactivity to the mammalian-expressed FGF-8a from an alternative major supplier. Qkine provides a reliable source of high-quality animal origin-free FGF-8a for reproducible culture and differentiation of iPSC, ESC and NSC.

