KRFK TFA

Cat. No.: HY-P3970A

Molecular Formula: $C_{27}H_{47}N_9O_5.xC_2HF_3O_2$

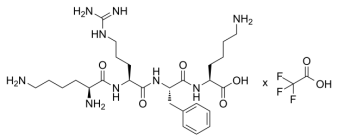
Sequence: Lys-Arg-Phe-Lys

Sequence Shortening: KRFK

Target: TGF-β Receptor

Pathway: TGF-beta/Smad

Storage: -20°C, sealed storage, away from moisture
* In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture)



SOLVENT & SOLUBILITY

In Vitro	DMSO : ≥ 100 mg/mL * "≥" means soluble, but saturation unknown.

BIOLOGICAL ACTIVITY

Description	KRFK TFA, a peptide derived from TSP-1, can activate TGF-β. KRFK TFA promotes TGF-β-mediated signaling and its downstream role, independent of thrombospondin (TSP) receptors such as CD47 and CD36. KRFK TFA can be used for chronic ocular surface inflammatory disorders reseach[1].
IC_{50} & Target	TGF-β[1]
In Vitro	KRFK TFA (50 μM; 24 h) activates the secretion of TGF-β and reduces the expression of DC maturation markers in tsp-1 deficient bone marrow-derived dendritic cells (BMDCs) [1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.
In Vivo	KRFK TFA (5 μg/5 μL/eyes; single dose) significantly prevents the development of chronic ocular surface inflammation in TSP-$1^{-/-}$ mice[1]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Soriano-Romaní L, et al. Topical Application of TGF-β-Activating Peptide, KRFK, Prevents Inflammatory Manifestations in the TSP-1-Deficient Mouse Model of Chronic Ocular Inflammation. Int J Mol Sci. 2018 Dec 20;20(1):9.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA