

Product Data Sheet

Product Name: IFN-α Receptor Recognition Peptide 1 acetate

Cat. No.: GC79426

Chemical Properties

Cas. No.

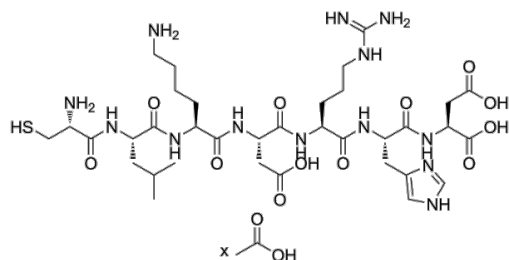
Formula $C_{35}H_{59}N_{13}O_{12}S \cdot xC_2H_4O_2$ M.Wt 885.99

Solubility DMSO: ≥ 100 mg/mL Storage Sealed storage, away from moisture

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

IFN-α Receptor Recognition Peptide 1 acetate (IRR1P1 acetate) is an amino acid synthetic peptide

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

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and also a regulator of IFN- α Receptor. IFN- α Receptor Recognition Peptide 1 acetate binds to IFNAR2, enhances the binding capacity of IFN- α receptor, and slightly increases the IFN- α -induced growth inhibitory activity. IFN- α Receptor Recognition Peptide 1 acetate inhibits IFN- α -induced STAT1 phosphorylation and STAT-DNA binding by blocking the activation of IFNAR by IFN- α . IFN- α Receptor Recognition Peptide 1 acetate increases the occupancy of IFN- α on cell surface receptors, enhances the phosphorylation activation of ISGF3, and elevates IFN- α -induced antiviral activity. IFN- α Receptor Recognition Peptide 1 acetate can be used in studies related to encephalomyocarditis virus infection [1] [2].

In Vitro, IFN- α Receptor Recognition Peptide 1 acetate can enhance the IFN- α 2 binding ability of Daudi cells^[2]. IFN- α Receptor Recognition Peptide 1 acetate does not activate ISGF3 in Daudi cells alone, but enhances IFN-Con1-induced ISGF3 activation when co-administered with 0.016 ng/mL IFN-Con1^[2]. IFN- α Receptor Recognition Peptide 1 acetate enhances IFN-Con1-induced ISGF3 activation in MRC-5 cells when co-administered with 1.0 ng/mL IFN-Con1^[2]. IFN- α Receptor Recognition Peptide 1 (1 μ g/mL; 24 h) acetate does not protect T98G cells from EMCV infection alone, but enhances the antiviral potency of sub-optimal doses of IFN-Con1, increasing percent protection from EMCV CPE^[2]. IFN- α Receptor Recognition Peptide 1 (1 μ g/mL; 96 h at 37°C) acetate marginally enhances IFN-Con1-induced growth inhibition in T98G cells, with the strongest effects at lower IFN-Con1 doses^[2].

References:

- [1]. Bello AM, et al. Small molecule mimetics of an interferon- α receptor interacting domain. Bioorg Med Chem. 2014 Feb 1;22(3):978-85.
- [2]. Fish EN. Interferon receptor recognition peptides enhance the biological potency of interferon alphas. FEBS Lett. 1995 May 22;365(1):87-91.

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