IRBP (1-20), human TFA

Cat. No.: HY-P1587A

Molecular Formula: $C_{103}H_{165}F_3N_{24}O_{30}S$

Molecular Weight: 2308.62

Sequence: Gly-Pro-Thr-His-Leu-Phe-Gln-Pro-Ser-Leu-Val-Leu-Asp-Met-Ala-Lys-Val-Leu-Leu-Asp

GPTHLFQPSLVLDMAKVLLD (TFA salt)

Sequence Shortening: GPTHLFQPSLVLDMAKVLLD

Target: Others

Pathway: Others

Storage: Sealed storage, away from moisture

Powder -80°C 2 years

-20°C 1 year

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

SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (43.32 mM; Need ultrasonic)

H_2O : 8.33 mg/mL (3.61 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	0.4332 mL	2.1658 mL	4.3316 mL
	5 mM	0.0866 mL	0.4332 mL	0.8663 mL
	10 mM	0.0433 mL	0.2166 mL	0.4332 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 2.5 mg/mL (1.08 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

IRBP (1-20), human TFA contains a major epitope for the H-2^b haplotype. IRBP (1-20), human TFA induces experimental autoimmune uveoretinitis (EAU) in H-2^b mice[1][2].

In Vivo

IRBP (1-20), human TFA induces EAU[2].

For determination of proliferative and cytokine responses, lymph node and spleen cells are collected 21 days after immunization and are stimulated in culture with the appropriate antigen. Cells of C57BL/6 mice and 129/J mice immunized with IRBP (1-20), human TFA proliferated in response to the peptide[2].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Animal Model:	C57BL/6 (H-2^b) mice, H-2b (C57BL/6, 129/J) mice[2]
Dosage:	200, 300 μg
Administration:	I.h.; After 21 days
Result:	C57BL/6 (H-2^b) mice immunized with the human peptide (200-300 μg= 80-120 nmoles) developed EAU. 129/J mice (H-2^b) also developed disease, albeit with a lower average score than C57BL/6.

REFERENCES

[1]. Avichezer D, et al. Residues 1-20 of IRBP and whole IRBP elicit different uveitogenic and immunological responses in interferon gamma deficient mice. Exp Eye Res. 2000;71(2):111-118.

[2]. Avichezer D, Silver PB, Chan CC, Wiggert B, Caspi RR. Identification of a new epitope of human IRBP that induces autoimmune uveoretinitis in mice of the H-2b haplotype. Invest Ophthalmol Vis Sci. 2000;41(1):127-131.

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