

PTP σ Inhibitor, ISP

Cat. No.:	HY-P5982
Molecular Formula:	C ₁₇₇ H ₃₀₆ N ₆₆ O ₅₄ S ₃
Molecular Weight:	4318.93
Sequence:	Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Cys-Asp-Met-Ala-Glu-His-Met-Glu-Arg-Leu-Lys-Ala-Asn-Asp-Ser-Leu-Lys-Leu-Ser-Gln-Glu-Tyr-Glu-Ser-Ile-NH ₂
Sequence Shortening:	GRKKRRQRRRCDMAEHMERLKANDSLKLSQEYESI-NH ₂
Target:	Phosphatase
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.

BIOLOGICAL ACTIVITY

Description	PTP σ Inhibitor, ISP can bind to recombinant human PTPs and inhibits PTP σ signaling. PTP σ Inhibitor, ISP can penetrate the membrane and relieves the chondroitin sulfate proteoglycan (CSPG)-mediated axonal sprouting inhibition in spinal cord injury model. PTP σ Inhibitor, ISP enhances remyelination in LPC-induced demyelinated spinal cord. PTP σ Inhibitor, ISP also promotes oligodendrocyte progenitor cells (OPCs) migration, maturation, remyelination, and functional recovery in animal models of Multiple Sclerosis (MS) ^{[1][2]} .
IC ₅₀ & Target	PTP σ ^[1] .

REFERENCES

- [1]. Niknam P, et al. Modulating proteoglycan receptor PTP σ using intracellular sigma peptide improves remyelination and functional recovery in mice with demyelinated optic chiasm. *Mol Cell Neurosci*. 2019 Sep;99:103391.
- [2]. Luo F, et al. Modulation of proteoglycan receptor PTP σ enhances MMP-2 activity to promote recovery from multiple sclerosis. *Nat Commun*. 2018 Oct 8;9(1):4126.

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

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