

PRODUCT DATA SHEET



PRODUCT: **L-JNKi1**
L-JNK Inhibitor 1

CAS NO.

CATALOG NO.: EI-354

LOT NO.: Z06484

STRUCTURE:

H-Gly-Arg-Lys-Lys-Arg-Arg-Gln-Arg-Arg-Arg-Pro-Pro-Arg-Pro-Lys-Arg-Pro-Thr-Thr-Leu-Asn-Leu-Phe-Pro-Gln-Val-Pro-Arg-Ser-Gln-Asp-NH₂
(L)-HIV-TAT[48-57]-Pro-Pro-hJIP[157-175]

PHYSICAL APPEARANCE: White solid supplied as trifluoroacetate salt.

MOLECULAR FORMULA: C₁₆₄H₂₈₆N₆₆O₄₀

MOLECULAR WEIGHT: 3822.3Da

PURITY: >98% (RP-HPLC)

SOLUBILITY: Soluble in water

STORAGE: Store dry at -20°C for up to 2 years. Store solutions at -20°C for up to 3 months. Avoid freeze-thaw cycles.

APPLICATION NOTES: A cell permeable JNK (c-jun N-terminal kinase) peptide inhibitor, derived from the human c-jun N-terminal kinase (JNK) interacting protein (JIP), also known as Islet-Brain-1 (IB1) and mitogen-activated protein kinase 8 interacting protein 1. The decapeptide HIV-TAT[48-57] transporter sequence has been added at the amino-terminal to convey cell permeability¹, separated from the JIP-derived peptide by the insertion of di-proline². L-JNKi1 inhibits the interaction between JNK (JNK-1, -2 and -3) and its substrate (*in vitro* IC₅₀ ~ 1µM). The L-stereoisomer is readily degraded when administered to experimental animals, and a D- form of the inhibitor having an extended half-life^{3,4} is available from BIOMOL (Cat. # EI-355).

- REFERENCES:
1. H. Nagahara *et al.* *Nature Med.* 1998 **4** 1449
 2. C. Bonny *et al.* *Diabetes* 2001 **50** 77
 3. T. Borsello *et al.* *Nature Med.* 2003 **9** 1180
 4. T. Borsello and C. Bonny *Trends Molec. Med.* 2004 **10** 239

The pharmacological and toxicological properties of this product have not been fully investigated. Exercise caution in use and handling. This product must not be used in humans.