# PRODUCT INFORMATION



# JNK Inhibitor VIII

Item No. 15946

CAS Registry No.: 894804-07-0

Formal Name: N-(4-amino-5-cyano-6-ethoxy-

2-pyridinyl)-2,5-dimethoxy-

benzeneacetamide

Synonyms: c-Jun N-terminal Kinase Inhibitor VIII,

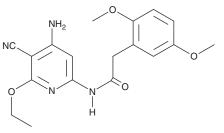
TCS JNK 6o

MF:  $C_{18}H_{20}N_4O_4$ FW: 356.4 **Purity:** ≥98%

 $\lambda_{\text{max}}$ : 230, 274 nm UV/Vis.: A crystalline solid Supplied as:

-20°C Storage: ≥2 years Stability:

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



## **Laboratory Procedures**

JNK Inhibitor VIII is supplied as a crystalline solid. A stock solution may be made by dissolving the JNK Inhibitor VIII in the solvent of choice, which should be purged with an inert gas. JNK Inhibitor VIII is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of JNK Inhibitor VIII in these solvents is approximately 10 mg/ml.

JNK Inhibitor VIII is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, JNK Inhibitor VIII should first be dissolved in DMSO and then diluted with the aqueous buffer of choice. JNK Inhibitor VIII has a solubility of approximately 0.3 mg/ml in a 1:2 solution of DMSO:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

## Description

JNK inhibitor VIII is an inhibitor of JNK1, JNK2, and JNK3 (K,s= 2, 4, and 52 nM, respectively).1 It is selective for JNK1, JNK2, and JNK3 over a panel of 74 kinases (Kis = >720 nM for all). It inhibits the phosphorylation of c-Jun in HepG2 cells (EC $_{50}$  = 920 nM). JNK inhibitor VIII (10  $\mu$ M) inhibits NGF-induced neuronal growth and proNGF-induced neurotoxicity of primary mouse superior cervical ganglion neurons.<sup>2</sup> It reduces apoptosis induced by glutathione peroxidase 1 (GPX1) siRNA knockdown in HeLa cells when used at a concentration of 10  $\mu$ M.<sup>3</sup>

#### References

- 1. Szczepankiewicz, B.G., Kosogof, C., Nelson, L.T., et al. Aminopyridine-based c-Jun N-terminal kinase inhibitors with cellular activity and minimal cross-kinase activity. J. Med. Chem. 49(12), 3563-3580 (2006).
- Guha, I., Slamova, I., Chun, S., et al. The effects of short-term JNK inhibition on the survival and growth of aged sympathetic neurons. Neurobiol. Aging 46, 138-148 (2016).
- Lee, E.-K., Kang, D.H., et al. Glutathione peroxidase-1 regulates ASK1-dependent apoptosis via interaction with TRAF2 in RIPK3-negative cancer cells. Exp. Mol. Med. 53(6), 1080-1091 (2021).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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