# PRODUCT INFORMATION

## JNK Inhibitor VIII

*Item No. 15946*

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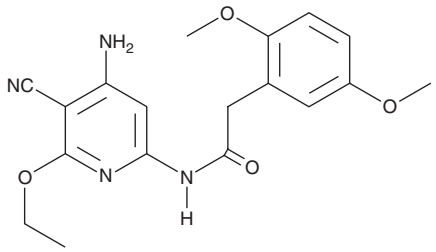
| **CAS Registry No.:** | 894804-07-0 |
| **Formal Name:** | N-(4-amino-5-cyano-6-ethoxy-2-pyridinyl)-2,5-dimethoxy-benzeneacetamide |
| **Synonyms:** | c-Jun N-terminal Kinase Inhibitor VIII, TCS JNK 6o |
| **MF:** | $C_{18}H_{20}N_4O_4$ |
| **FW:** | 356.4 |
| **Purity:** | ≥98% |
| **UV/Vis.:** | $\lambda_{max}$: 230, 274 nm |
| **Supplied as:** | A crystalline solid |
| **Storage:** | -20°C |
| **Stability:** | ≥2 years |




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

### 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).
2. 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).
3. 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).





**CAYMAN CHEMICAL**
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
**PHONE:** [800] 364-9897
[734] 971-3335
**FAX:** [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM