

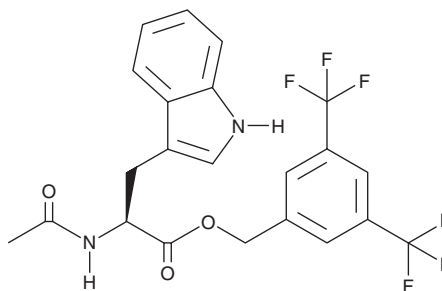
# PRODUCT INFORMATION



**L-732,138**

Item No. 30894

**CAS Registry No.:** 148451-96-1  
**Formal Name:** N-acetyl-L-tryptophan  
[3,5-bis(trifluoromethyl)phenyl]  
methyl ester  
**MF:** C<sub>22</sub>H<sub>18</sub>F<sub>6</sub>N<sub>2</sub>O<sub>3</sub>  
**FW:** 472.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 221 nm  
**Supplied as:** A crystalline solid  
**Storage:** -20°C  
**Stability:** ≥4 years



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

## Laboratory Procedures

L-732,138 is supplied as a crystalline solid. A stock solution may be made by dissolving the L-732,138 in the solvent of choice, which should be purged with an inert gas. L-732,138 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of L-732,138 in these solvents is approximately 30 mg/ml.

## Description

L-732,138 is a neurokinin-1 (NK<sub>1</sub>) receptor antagonist (IC<sub>50</sub> = 1.6 nM in CHO cells expressing the human receptor).<sup>1</sup> It is selective for NK<sub>1</sub> over NK<sub>2</sub> and NK<sub>3</sub> receptors (IC<sub>50</sub>s = >5,000 nM for both). L-732,138 inhibits the growth of COLO 858, MEL HO, and COLO 679 melanoma cells (IC<sub>50</sub>s = 44.6, 76.3, and 64.2 μM, respectively), as well as induces apoptosis in these cell lines.<sup>2</sup> It inhibits plasma extravasation induced by substance P (Item No. 24035) in guinea pigs (ID<sub>50</sub> = 8 mg/kg, i.p.).<sup>1</sup> L-732,138 attenuates mechanical allodynia and cold hyperalgesia in a rat model of neuropathic pain induced by chronic constriction injury of the sciatic nerve.<sup>3</sup>

## References

1. MacLeod, A.M., Merchant, K.J., Brookfield, F., *et al.* Identification of L-tryptophan derivatives with potent and selective antagonist activity at the NK<sub>1</sub> receptor. *J. Med. Chem.* **37**(9), 1269-1274 (1994).
2. Muñoz, M., Rosso, M., González-Ortega, A., *et al.* The NK-1 receptor antagonist L-732,138 induces apoptosis and counteracts substance P-related mitogenesis in human melanoma cell lines. *Cancers (Basel)* **2**(2), 611-623 (2010).
3. Cahill, C.M. andCoderre, T.J. Attenuation of hyperalgesia in a rat model of neuropathic pain after intrathecal pre- or post-treatment with a neurokinin-1 antagonist. *Pain* **95**(3), 277-285 (2002).

### WARNING

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

### SAFETY DATA

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.

### WARRANTY AND LIMITATION OF REMEDY

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