

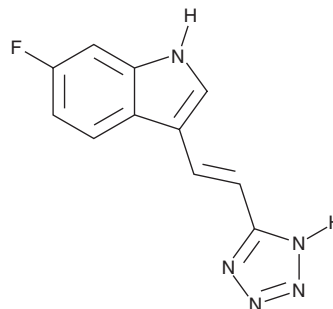
PRODUCT INFORMATION



LM-10

Item No. 36291

CAS Registry No.: 1316695-35-8
Formal Name: 6-fluoro-3-[(1E)-2-(2H-tetrazol-5-yl)ethenyl]-1H-indole
MF: C₁₁H₈FN₅
FW: 229.2
Purity: ≥98%
UV/Vis.: λ_{max}: 226, 328 nm
Supplied as: A 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

LM-10 is supplied as a solid. A stock solution may be made by dissolving the LM-10 in the solvent of choice, which should be purged with an inert gas. LM-10 is soluble in organic solvents such as DMSO and dimethyl formamide. The solubility of LM-10 in these solvents is approximately 10 and 1 mg/ml, respectively.

Description

LM-10 is an inhibitor of tryptophan 2,3-dioxygenase (TDO; IC₅₀ = 2 μM).¹ It is selective for TDO over indoleamine 2,3-dioxygenase (IDO), monoamine oxidase A (MAO-A), and MAO-B, as well as a panel of various receptors and transporters, at 10 μM. LM-10 (1 mg/ml in the drinking water) reverses tumoral immune resistance in a TDO-overexpressing P815B mastocytoma syngeneic model using mice immunized with the P815 antigen P1A.² Oral administration of LM-10 (50 mg/kg) prevents decreases in the number of dopaminergic neurons and increases in microglial cell volume, a marker of neuroinflammation, in the substantia nigra and inhibits decreases in intestinal transit in a mouse model of Parkinson's disease induced by rotenone (Item No. 13995).³

References

1. Dolušić, E., Larrieu, P., Moineaux, L., *et al.* Tryptophan 2,3-dioxygenase (TDO) inhibitors. 3-(2-(Pyridyl)ethenyl)indoles as potential anticancer immunomodulators. *J. Med. Chem.* **54(15)**, 5320-5334 (2011).
2. Pilotte, L., Larrieu, P., Stroobant, V., *et al.* Reversal of tumoral immune resistance by inhibition of tryptophan 2,3-dioxygenase. *Proc. Natl. Acad. Sci. USA* **109(7)**, 2497-2502 (2012).
3. Perez-Pardo, P., Grobbsen, Y., Willemsen-Seegers, N., *et al.* Pharmacological validation of TDO as a target for Parkinson's disease. *FEBS J.* **288(14)**, 4311-4331 (2021).

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.

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