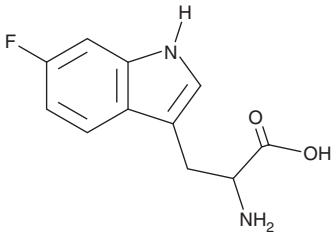
PRODUCT INFORMATION

6-fluoro-DL-Tryptophan

Item No. 17643

CAS Registry No.:	7730-20-3
Formal Name:	6-fluoro-tryptophan
Synonyms:	DL-6-Fluorotryptophan, NSC 9364
MF:	$C_{11}H_{11}FN_2O_2$
FW:	222.2
Purity:	≥95%
UV/Vis.:	λ_{max}: 218 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

6-fluoro-DL-Tryptophan is supplied as a crystalline solid. A stock solution may be made by dissolving the 6-fluoro-DL-tryptophan in the solvent of choice, which should be purged with an inert gas. 6-fluoro-DL-Tryptophan is soluble in organic solvents such as methanol and acetic acid (2%). The solubility of 6-fluoro-DL-tryptophan in these solvents is approximately 0.1 and 1 mg/ml, respectively.

6-fluoro-DL-Tryptophan is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

Tryptophan is an amino acid precursor of serotonin (Item No. 14332) and melatonin (Item No. 14427). 6-fluoro-DL-Tryptophan is a serotonin synthesis inhibitor that is metabolized in the brain and may be useful for tracing pools of neuronal serotonin.[1,2] It is used as a competitive inhibitor of tryptophan binding to albumin and can behave as a substrate for the serotonin neural transporter for passage through the blood brain barrier.[1-3]

References

1. Chanut, E., Trouvin, J.H., Bondoux, D., *et al*. Metabolism of 6-fluoro-DL-tryptophan and its specific effects on the rat brain serotoninergic pathway. *Biochem. Pharmacol.* **45(5)**, 1049-1057 (1992).
2. Chanut, E., Bonnet, J.J., Trouvin, J.H., *et al*. 6-Fluoro-serotonin as a substrate for the neuronal serotonin transporter. *J. Neural Transm.* **96**, 105-112 (1994).
3. Chanut, E., Zini, R., Trouvin, J.H., *et al*. Albumin binding and brain uptake of 6-fluoro-DL-tryptophan: Competition with L-tryptophan. *Biochem. Pharmacol.* **44(10)**, 2082-2085 (1992).

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