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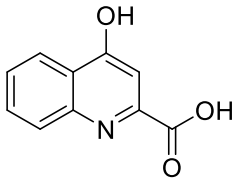
PRODUCT DATA SHEET

Kynurenic acid

Code No.: **BIA-K2207**

Pack sizes: **5 mg, 25 mg**



Synonyms : NSC 58973, 4-Hydroxyquinoline-2-carboxylic acid, Quinurenic acid

Specifications

CAS #	:	**492-27-3**
Molecular Formula	:	**$C_{10}H_7NO_3$**
Molecular Weight	:	**189.17**
Source	:	**Synthetic**
Appearance	:	**Off-white to grey solid**
Purity	:	**>95% by HPLC**
Long Term Storage	:	**-20°C**
Solubility	:	**Soluble in methanol or DMSO**

Application Notes

Kynurenic acid is an endogenous tryptophan metabolite of mammals and a constituent of Ephedra transitoria. Kynurenic acid is an antagonist of N-methyl-D-aspartate (NMDA) and α-7 nicotinic acetylcholine (α7nACh) receptors and scavenges hydroxyl radicals under controlled conditions of free radical production. Kynurenic acid activates the AhR signal transduction pathway which has an important role in immune responses and developmental and pathological regulation. Kynurenic acid has analgesic properties via GPR35 activation.

References

1. Identification and measurement of kynurenic acid in the rat brain and other organs. Lombardi C. et al. Analyt Biochem. 1988, 169, 89.
2. On the antioxidant properties of kynurenic acid: Free radical scavenging activity and inhibition of oxidative stress. Lugo-Huitron R. et al. Neurotoxicol Teratol. 2011, 33, 538.
3. Tryptophan metabolites, indole-3-pyruvic acid, DL-3-indolelactic acid, L-kynurenine, and kynurenic acid, activate Ah receptor signal transduction. Heat-Pagliuso S. et al. Organohalogen Compounds 2000, 49, 289.
4. Kynurenic acid and zaprinast induce analgesia by modulating HCN channels through GPR35 activation. Resta F. et al. Neuropharmacol. 2016, 108, 136.

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