

Produktinformation



Forschungsprodukte & Biochemikalien



Zellkultur & Verbrauchsmaterial



Diagnostik & molekulare Diagnostik



Laborgeräte & Service

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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

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- Trockeneiszuschlag
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Proteins



L-771688

Cat. No.: HY-U00237 CAS No.: 200050-59-5 Molecular Formula: $C_{28}H_{33}F_2N_5O_5$

Molecular Weight: 557.59

Target: Adrenergic Receptor

Pathway: GPCR/G Protein; Neuronal Signaling

Pure form -20°C Storage: 3 years

> In solvent -80°C 6 months

> > -20°C 1 month

Product Data Sheet

SOLVENT & SOLUBILITY

In Vitro

DMSO: $\geq 100 \text{ mg/mL} (179.34 \text{ mM})$

* "≥" means soluble, but saturation unknown.

Preparing Stock Solutions	Solvent Mass Concentration	1 mg	5 mg	10 mg
	1 mM	1.7934 mL	8.9672 mL	17.9343 mL
	5 mM	0.3587 mL	1.7934 mL	3.5869 mL
	10 mM	0.1793 mL	0.8967 mL	1.7934 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- 1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: ≥ 2.5 mg/mL (4.48 mM); Clear solution
- 2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline) Solubility: ≥ 2.5 mg/mL (4.48 mM); Clear solution
- 3. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (4.48 mM); Clear solution

BIOLOGICAL ACTIVITY

Description L-771688 is a highly selective α 1A-Adrenoceptor antagonist with a K_i of 0.43±0.02 nM.

Ki: 0.43±0.02 nM (α1A-Adrenoceptor)^[1] IC₅₀ & Target

In Vitro Specific [3 H]L-771688 binding to cloned human α 1A-Adrenoceptors is inhibited with high potency by subtype selective compounds, GG818 (K_i =0.026±0.002 nM) and L-771688 (K_i =0.052±0.008 nM) and subtype non-selective α 1-adrenoceptor antagonists, prazosin (K_i =0.088±0.0.032 nM) and terazosin (K_i =1.8±0.65 nM). The relative amount of [3 H]L-771688 (0.5 nM) binding in various rat tissue membranes is highest in submaxillary gland (9.5 pmol/g tissue), followed by brain (5.8 pmol/g tissue), vas deferens (4.3 pmol/g tissue), kidney (3.4 pmol/g tissue), heart (1.5 pmol/g tissue), urethra (1.1 pmol/g tissue) and prostate (0.88 pmol/g tissue). In contrast, low specific [³H]L-771688 binding is observed in rat urinary bladder (0.55 pmol/g tissue), liver (0.44 pmol/g tissue), aorta (0.11 pmol/g tissue) and spleen (0.11 pmol/g tissue)^[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

PROTOCOL

Cell Assay [1]

 $[^3H]$ L-771688 is prepared by a catalytic reduction of the precursor, L-797429, in the presence of tritium gas followed by preparative high pressure liquid chromatography. Receptor membranes are prepared for $[^3H]$ prazosin/ $[^{125}I]$ HEAT binding assays. To measure $[^3H]$ L-771688 binding, 980 μL of membranes (cloning human α1A or rat tissues) are added to triplicate tubes containing 10 μL of dimethyl sulfoxide (DMSO) (for total binding) or phentolamine (10 μM final concentration, for nonspecific binding) or tested compounds (at the desiring final concentrations) and 10 μL of $[^3H]$ L-771688 (0.3 to 0.6 nM final concentration for routine studies and 10 pM to 5 nM for saturation assays). $[^3H]$ L-771688 is diluted in DMSO/methanol/water (1:1:2) from stock solution to minimize its loss to the wall of test tubes. The binding reaction is conducted at 25°C for 1 h or various time intervals in the association rate studies $[^1]$.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Chang RS, et al. In vitro studies on L-771,688 (SNAP 6383), a new potent and selective alpha1A-adrenoceptor antagonist. Eur J Pharmacol. 2000 Dec 15;409(3):301-12.

Caution: Product has not been fully validated for medical applications. For research use only.

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