

Product Data Sheet

Product Name: FEMA 4774

Cat. No.: GC66047

Chemical Properties

Cas. No. 1359963-68-0

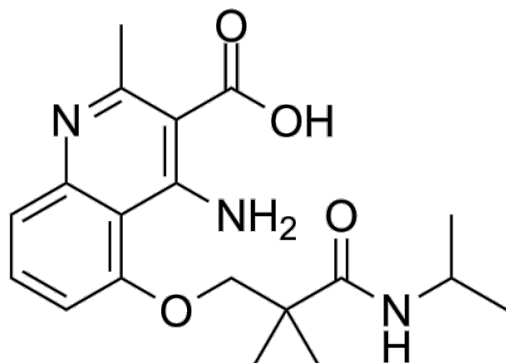
Formula $C_{19}H_{25}N_3O_4$ M.Wt 359.42

Solubility DMSO : ≥ 41.67 mg/mL (115.94 mM) Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37°C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution : ship with blue ice All other available size: ship with RT, or blue ice upon request.

Structure



Background

FEMA 4774 is a positive allosteric modulator of taste receptors **T1R2** and **T1R3**, two subunits of the human sweet taste receptor. FEMA 4774 is also used as a sucrose sweetness enhancer^[1].

FEMA 4774 (0-50 μM) induces a dose-dependent decrease in the EC_{50} value of sucrose and significantly enhances the affinity of sucrose for its binding site with an α (effect of modulator on agonist affinity) value of 30 in the human sweet receptor cells^[1].

FEMA 4774 (S9632) (oral gavage, 500-2000 mg/kg) does not cause a dose-dependent increase in polychromatic erythrocytes and induces micronuclei formation at dose levels up to 2000 mg/kg in Swiss

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

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albino (CD-1) mice^[2].

The pharmacokinetic parameters of FEMA 4774 (S9632) in Male and Female Sprague-Dawley Rats

Route	Day	Dose (mg/kg)	Sex	C _{max} (ng/mL)±SD	T _{max} ^t _{1/2} (hr)	AUC _{0-last} (ng•hr/mL)	AUC _{0-last/dose} (ng•hr/mL/mg/kg)	%F
iv	1	1.0	M	2036.7±281.9	0.03	0.19330.6±58	330.6	-
			F	2625.8±679.9	0.03	0.27411.9±116.3	411.9	-
Oral gavage	1	10	M	12.9±3.2	0.25	1.2117.9±2.3	1.79	0.54
			F	34.0±3.9	0.25	1.1749.2±7.8	4.92	1.19
	30		M	90.0±23.9	0.33	0.8890.8±11.0	3.03	0.92
			F	62.4±25.9	0.42	1.0695.0±20.4	3.17	0.77
	100		M	147.2±86.3	0.33	0.71176.2±73.8	1.76	0.53
			F	268.5±90.7	0.25	0.99341.1±81.0	3.41	0.83
Oral gavage	7	10	M	16.2±3.6	0.50	0.8448.1±33.2	4.81	-
			F	32.7±9.7	0.33	1.1758.9±25.4	5.89	-
	30		M	74.5±16.2	0.33	0.9486.0±8.7	2.87	-
			F	77.1±41.7	0.25	1.39106.8±8.7	3.56	-
	100		M	117.9±15.3	0.25	0.72185.3±15.3	1.85	-
			F	189.7±79.5	0.25	0.89278.9±79.0	2.79	-

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