# **PRODUCT** INFORMATION



## **Taranabant**

Item No. 10009795

CAS Registry No.: Formal Name:	701977-09-5 N-[(1S,2S)-3-(4-chlorophenyl)-2- (3-cyanophenyl)-1-methylpropyl]- 2-methyl-2-[[5-(trifluoromethyl)- 2-pyridinyl]oxy]-propanamide	
Synonym:	MK-0364	
MF:	$C_{27}H_{25}CIF_3N_3O_2$	
FW:	516.0	CF3
Purity:	≥98%	
UV/Vis.:	λ <sub>max</sub> : 220, 270, 311 nm	CI V
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

Taranabant is supplied as a crystalline solid. A stock solution may be made by dissolving the taranabant in the solvent of choice, which should be purged with an inert gas. Taranabant is soluble in the organic solvent DMSO at a concentration of approximately 50 mM.

## Description

Taranabant is a cannabinoid (CB) receptor 1 inverse agonist ( $K_i = 0.13 \text{ nM}$ ).<sup>1</sup> It is selective for CB<sub>1</sub> over CB<sub>2</sub> receptors (K<sub>i</sub> = 170 nM), as well as a panel of 170 receptors, enzymes, ion channels, and transporters at  $1 \mu$ M. Taranabant increases forskolin-induced cAMP production in CHO cell membranes expressing human CB<sub>1</sub> (EC<sub>50</sub> = 2 nM). In vivo, taranabant (3 mg/kg) reverses hypothermia induced by the CB receptor agonist CP<sup>55,940</sup> in rats. Taranabant (1 and 3 mg/kg) reduces two-hour and overnight food intake, as well as overnight weight gain in wild-type, but not CB1 receptor-deficient, mice.

## Reference

1. Fong, T.M., Guan, X.-M., Marsh, D.J., et al. Antiobesity efficacy of a novel cannabinoid-1 receptor inverse agonist, N-[(1S,2S)-3-(4-chlorophenyl)-2-(3-cyanophenyl)-1-methylpropyl]-2-methyl-2-[[5-(trifluoromethyl)pyridin-2-yl]oxy]propanamide (MK-0364), in rodents. J. Pharmacol. Exp. Ther. 321(3), 1013-1022 (2007).

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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