



LF3

Cat. No.:	OB0225WX-1708
Appearance:	Solid
Purity:	≥95%
Identity:	Confirmed by NMR, and LC-MS.
Size:	2 mg; 5 mg; 10 mg; 25 mg; 50 mg; 100 mg

This product is for research use only and is not intended for diagnostic use.

Product Overview

Description	LF3 is a small molecule that specifically antagonizes canonical Wnt signaling by disrupting the binding interaction between TCF4 and β -catenin with an IC ₅₀ of less than 2 μ M.
Synonym	664969-54-4; LF3; <i>N</i> -[4-(Aminosulfonyl)phenyl]-4-(3-phenyl-2-propenyl)-1-piperazinecarbothioamide; 4-[(2 <i>E</i>)-3-phenylprop-2-en-1-yl]- <i>N</i> -(4-sulfamoylphenyl)piperazine-1-carbothioamide; 4-[(<i>E</i>)-3-phenylprop-2-enyl]- <i>N</i> -(4-sulfamoylphenyl)piperazine-1-carbothioamide; 4-(3-Phenylallyl)- <i>N</i> -(4-sulfamoylphenyl)piperazine-1-carbothioamide; 1-Piperazinecarbothioamide, <i>N</i> -[4-(aminosulfonyl)phenyl]-4-(3-phenyl-2-propen-1-yl)-; 4-cinnamyl- <i>N</i> -(4-sulfamoylphenyl)piperazine-1-carbothioamide 1486; D80501; Z274769002; <i>N</i> -[4-(aminosulfonyl)phenyl]-4-[(2 <i>E</i>)-3-phenylprop-2-en-1-yl]piperazine-1-carbothioamide
CAS No.	664969-54-4
Compound CID	1213452
Formula	C ₂₀ H ₂₄ N ₄ O ₂ S ₂
Formula Weight	416.56

Specification

Targets&IC50	β -catenin/TCF4 (Alpha Screen): 1.65 μ M ; β -catenin/TCF4 (ELISA): 1.82 μ M
Relative Density	1.341 g/cm ³
IUPAC Name	4-[(<i>E</i>)-3-Phenylprop-2-enyl]- <i>N</i> -(4-sulfamoylphenyl)piperazine-1-carbothioamide



InChI	InChI=1S/C20H24N4O2S2/c21-28(25,26)19-10-8-18(9-11-19)22-20(27)24-15-13-23(14-16-24)12-4-7-17-5-2-1-3-6-17/h1-11H,12-16H2,(H,22,27)(H2,21,25,26)/b7-4+
InChI Key	ZUQIFHLBPBLRRM-QPJJXVBHSA-N
SMILES string	C1CN(CCN1C/C=C/C2=CC=CC=C2)C(=S)NC3=CC=C(C=C3)S(=O)(=O)N
Stability	3 years in powder form.
Storage	Storage at -20°C.
Applications	LF3 is used in cell signaling studies to investigate the specific blockage of the interaction between beta-catenin and the TCF4 transcription factor in colorectal cancer models.

Library Information

Target	Wnt/ β -Catenin
Receptor	β -Catenin
Pathways	Cytoskeletal signaling; Stem cells
Plate Number	AOCL-22
Plate Location	h3
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	32 mg/mL; 76.82 mM
ALogP	3.762
HBA_Count	2
HBD_Count	2
Rotatable Bond	7