



TPCA-1

Cat. No.:	OB0225WX-2523
Appearance:	Solid
Purity:	≥99%
Identity:	Confirmed by NMR, and HPLC.
Size:	10 mg; 50 mg; 1 g

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

Product Overview

Description	TPCA-1 functions as an IKK-2 inhibitor (IC ₅₀ : 17.9 nM) that suppresses the NF-κB p38 signaling pathway and targets STAT3, showing 22-fold selectivity over IKK-1.
Synonym	GW683965; 507475-17-4; 5-(4-Fluorophenyl)-2-ureidothiophene-3-carboxamide; IKK-2 Inhibitor IV; TPCA1; 2-(carbamoylamino)-5-(4-fluorophenyl)thiophene-3-carboxamide; [5-(p-Fluorophenyl)-2-ureido]thiophene-3-carboxamide; IKK 2 Inhibitor IV; MF CD09037541; TPCA 1; 2-((aminocarbonyl)amino)-5-(4-fluorophenyl)-3-thiophenecarboxamide; 5-(4-fluorophenyl)-2-ureidothiophene-3-carboxylic acid amide; 2-[(Aminocarbonyl)amino]-5-(4-fluorophenyl)-3-thiophenecarboxamide; 5-(4-Fluorophenyl)-2-ureidothiophene-3-carboxylic acid amide; IKK 2 Inhibitor IV; 5-(4-fluorophenyl)-2-ureidothiophene-3-carboxylic acid amide; 5-(4-Fluorophenyl)-2-ureidothiophene-3-carboxylic acid amide; 5-(4-fluoro-phenyl)-2-ureido-thiophene-3-carboxylic acid amide
CAS No.	507475-17-4
Compound CID	9903786
Formula	C ₁₂ H ₁₀ FN ₃ O ₂ S
Formula Weight	279.29

Specification

IUPAC Name	2-(Carbamoylamino)-5-(4-fluorophenyl)thiophene-3-carboxamide
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InChI	InChI=1S/C12H10FN3O2S/c13-7-3-1-6(2-4-7)9-5-8(10(14)17)11(19-9)16-12(15)18/h1-5H,(H2,14,17)(H3,15,16,18)
InChI Key	SAYGKHKXGCP TLX-UHFFFAOYSA-N
SMILES string	<chem>C1=CC(=CC=C1C2=CC(=C(S2)NC(=O)N)C(=O)N)F</chem>
Stability	3 years in powder form.
Storage	Storage at -20°C.
Applications	TPCA-1 is used in inflammatory research as a selective inhibitor of IKK-2 to investigate the blockage of NF-kappaB activation and the subsequent reduction of pro-inflammatory cytokine production.

Library Information

Target	IκB/IKK; NF-κB; STAT
Receptor	IKK2; NF-κB; STAT3
Pathways	NF-κB
Plate Number	L6700-04
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	56 mg/mL; 200.51 mM
ALogP	1.544
HBA_Count	2
HBD_Count	3
Rotatable Bond	3