

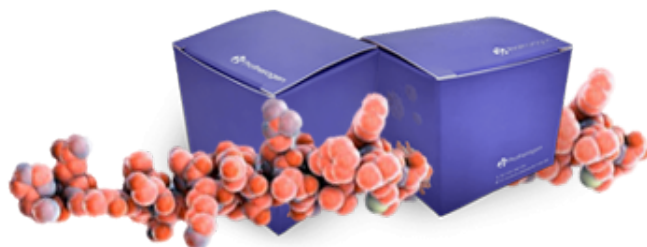
AKT inhibitor VIII

Cat. No.:	OB0225WX-1634
Appearance:	Solid
Purity:	≥98%
Identity:	Confirmed by NMR.
Size:	1 mg; 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	AKT inhibitor VIII is an isoform-specific inhibitor of Akt1 and Akt2 (IC ₅₀ : 58 n M and 210 nM), demonstrating a 36-fold higher selectivity for Akt1 compared to t he Akt3 subtype.
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Synonym	AKTi-1/2; 612847-09-3; Akt-I 1,2; 1,3-Dihydro-1-((4-(6-phenyl-1H-imidazo[4,5-g]quinoxalin-7-yl)phenyl)methyl)-4-piperidinyl)-2H-benzimidazol-2-one; 1-(1-(4-(6-Phenyl-1H-imidazo[4,5-g]quinoxalin-7-yl)benzyl)-piperidin-4-yl)-1H-benzo[d]imidazol-2(3H)-one; 3-[1-[[4-(7-phenyl-3H-imidazo[4,5-g]quinoxalin-6-yl)phenyl]methyl]piperidin-4-yl]-1H-benzimidazol-2-one; 1-(1-(4-(7-Phenyl-1H-imidazo[4,5-g]quinoxalin-6-yl)benzyl)piperidin-4-yl)-1H-benzo[d]imidazol-2(3H)-one; Akt Inhibitor VIII, Isozyme-Selective, Akti-1/2; 1,3-dihydro-1-(1-((4-(6-phenyl-1H-imidazo[4,5-g]quinoxalin-7-yl)phenyl)methyl)-4-piperidinyl)-2H-benzimidazol-2-one; 1-(1-((4-(7-Phenyl-1H-imidazo[4,5-g]quinoxalin-6-yl)phenyl)methyl)piperidin-4-yl)-1H-benzo[d]imidazol-2(3H)-one; 1-{1-[(4-{6-phenyl-1H-imidazo[4,5-g]quinoxalin-7-yl}phenyl)methyl]piperidin-4-yl}-2,3-dihydro-1H-1,3-benzodiazol-2-one; 3-[1-[[4-(6-phenyl-8H-imidazo[4,5-g]quinoxalin-7-yl)phenyl]methyl]piperidin-4-yl]-1H-benzimidazol-2-one; Akti-1-2 compound; Akti-1-2 compound; isozyme-selective, Akti-1/2; 1-(1-(4-(6-Phenyl-1H-imidazo[4,5-g]quinoxalin-7-yl)benzyl)piperidin-4-yl)-1H-benzo[d]imidazol-2(3H)-one; 1,3-Dihydro-1-[1-[[4-(6-phenyl-1H-imidazo[4,5-g]quinoxalin-7-yl)phenyl]methyl]4-piperidinyl]-2H-benzimidazol-2-one; 1,3-Dihydro-1-[1-[[4-(6-phenyl-1H-imidazo[4,5-g]quinoxalin-7-yl)phenyl]methyl]-4-piperidinyl]-2H-benzimidazol-2-one; 1-(1-(4-(7-Phenyl-1H-imidazo[4,5-g]quinoxalin-6-yl)benzyl)piperidin-4-yl)-1,3-dihydro-2H-benzo[d]imidazol-2-one; 1-(1-(4-(phenyl-1H-imidazo[4,5-g]quinoxalin-6-yl)benzyl)piperidin-4-yl)-1H-benzo[d]imidazol-2(3H)-one; 1-{1-[(4-{7-phenyl-1H-imidazo[4,5-g]quinoxalin-6-yl}phenyl)methyl]piperidin-4-yl}-2,3-dihydro-1H-1,3-benzodiazol-2-one; 1-{1-[4-(6-phenyl-1H-imidazo[4,5-g]quinoxalin-7-yl)benzyl]piperidin-4-yl}-1,3-dihydro-2H-benzimidazol-2-one
CAS No.	612847-09-3
Compound CID	135398501
Formula	C ₃₄ H ₂₉ N ₇
Formula Weight	551.64

Specification

Targets&IC50	Akt1: 58 nM; Akt2: 210 nM
Relative Density	1.351 g/cm ³
IUPAC Name	3-[1-[[4-(6-Phenyl-8H-imidazo[4,5-g]quinoxalin-7-yl)phenyl]methyl]piperidin-4-yl]-1H-benzimidazol-2-one
InChI	InChI=1S/C34H29N7O/c42-34-39-26-8-4-5-9-31(26)41(34)25-14-16-40(17-15-25)20-22-10-12-24(13-11-22)33-32(23-6-2-1-3-7-23)37-29-18-27-28(36-21-35-27)19-30(29)38-33/h1-13,18-19,21,25,38H,14-17,20H2,(H,39,42)
InChI Key	IWCQHVVUQEFDRIW-UHFFFAOYSA-N
SMILES string	C1CN(CCC1N2C3=CC=CC=C3NC2=O)CC4=CC=C(C=C4)C5=C(N=C6C=C7C(=NC=N7)C=C6N5)C8=CC=CC=C8
Stability	3 years in powder form.
Storage	Storage at -20°C.
Applications	AKT inhibitor VIII is used as a specific chemical probe in laboratory studies to explore the selective allosteric inhibition of Akt1 and Akt2 and its impact on cell cycle progression.

Library Information

Target	Akt
Receptor	Akt1; Akt2; Akt3
Pathways	Cytoskeletal signaling; Apoptosis; PI3K/Akt/mTOR signaling
Plate Number	AOCL-21
Plate Location	h9
Empty Location	a1-h1; a12-h12
Container	96-well plate
Formulation	10mM DMSO
DMSO Max Solubility	11 mg/mL; 20 mM
ALogP	5.466
HBA_Count	4
HBD_Count	2
Rotatable Bond	5