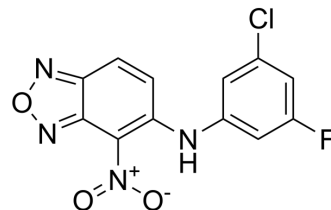


TC-S 7009

Cat. No.:	HY-18371		
CAS No.:	1422955-31-4		
Molecular Formula:	C ₁₂ H ₆ ClFN ₄ O ₃		
Molecular Weight:	308.65		
Target:	HIF/HIF Prolyl-Hydroxylase		
Pathway:	Metabolic Enzyme/Protease		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	2 years
		-20°C	1 year



SOLVENT & SOLUBILITY

In Vitro	DMSO : 50 mg/mL (162.00 mM; Need ultrasonic)			
		Solvent Concentration	Mass	
			1 mg	5 mg
			10 mg	
Preparing Stock Solutions	1 mM	3.2399 mL	16.1996 mL	32.3992 mL
	5 mM	0.6480 mL	3.2399 mL	6.4798 mL
	10 mM	0.3240 mL	1.6200 mL	3.2399 mL
Please refer to the solubility information to select the appropriate solvent.				
In Vivo	1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline Solubility: 2.08 mg/mL (6.74 mM); Suspended solution; Need ultrasonic			

BIOLOGICAL ACTIVITY

Description	TC-S 7009 is a potent and selective HIF-2 α inhibitor with a K _d of 81 nM. TC-S 7009 is more selective for HIF-2 α than HIF-1 α (K _d \approx 5 μ M). TC-S 7009 disrupts HIF-2 α heterodimerization, decreases DNA-binding activity, and reduces HIF-2 α target gene expression ^{[1][2]} .
IC₅₀ & Target	Kd: 81 nM (HIF-2 α) ^[1]
In Vitro	TC-S 7009 (0-100 μ M; 72 hours; HPF cells) treatment shows greater inhibition of cell proliferation in hypoxic conditions than that in normoxic conditions ^[2] . TC-S 7009 (50 μ M) treatment almost completely inhibits the hypoxia-induced NFATc2 nuclear translocation ^[2] . MCE has not independently confirmed the accuracy of these methods. They are for reference only. Cell Proliferation Assay ^[2]

Cell Line:	HPF cells in hypoxic conditions
Concentration:	0-100 μ M
Incubation Time:	72 hours
Result:	Showed greater inhibition of cell proliferation in hypoxic conditions than that in normoxic conditions.

REFERENCES

- [1]. Scheuermann TH, et al. Allosteric inhibition of hypoxia inducible factor-2 with small molecules. Nat Chem Biol. 2013 Apr;9(4):271-6.
- [2]. Senavirathna LK, et al. Hypoxia induces pulmonary fibroblast proliferation through NFAT signaling. Sci Rep. 2018 Feb 9;8(1):2709.
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Caution: Product has not been fully validated for medical applications. For research use only.

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