

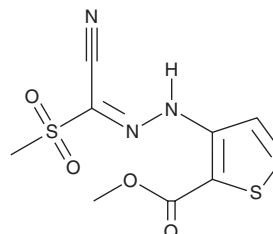
PRODUCT INFORMATION



HIF-2 α Translation Inhibitor 76

Item No. 42446

CAS Registry No.: 882268-69-1
Formal Name: 3-[[cyano(methylsulfonyl)methylene]hydrazinyl]-2-thiophenecarboxylic acid, methyl ester
Synonym: Hypoxia-Inducible Factor-2 α Translation Inhibitor 76
MF: C₉H₉N₃O₄S₂
FW: 287.3
Purity: $\geq 98\%$
Supplied as: A 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

HIF-2 α translation inhibitor 76 is supplied as a solid. A stock solution may be made by dissolving the HIF-2 α translation inhibitor 76 in the solvent of choice, which should be purged with an inert gas. HIF-2 α translation inhibitor 76 is soluble (≥ 10 mg/ml) in DMSO.

Description

HIF-2 α translation inhibitor 76 is an inhibitor of hypoxia-inducible factor-2 α (HIF-2 α) translation.¹ It inhibits constitutive gene expression in a hypoxia-response element (HRE) reporter assay using VHL-deficient 786-O renal cell carcinoma (RCC) cells (IC₅₀ = 5 μ M). HIF-2 α translation inhibitor 76 reduces the translation of nascent HIF-2 α mRNA in 786-O cells. Conditioned medium from 786-O cells preincubated with HIF-2 α translation inhibitor 76 inhibits the proliferation of human umbilical vein endothelial cells (HUVECs). HIF-2 α translation inhibitor 76 (10 nM) inhibits erythrocytosis and angiogenesis induced by DMOG (Item No. 71210) in zebrafish.² It increases survival and right ventricle contractility and inhibits right ventricle hypertrophy in a rat model of pulmonary arterial hypertension induced by monocrotaline (Item No. 16666).³

References

1. Zimmer, M., Ebert, B.L., Neil, C., *et al.* Small-molecule inhibitors of HIF-2 α translation link its 5'UTR iron-responsive element to oxygen sensing. *Mol. Cell.* **32**(6), 838-848 (2008).
2. Metelo, A.M., Noonan, H.R., Li, X., *et al.* Pharmacological HIF2 α inhibition improves VHL disease-associated phenotypes in zebrafish model. *J. Clin. Invest.* **125**(5), 1987-1997 (2015).
3. Dai, Z., Zhu, M.M., Peng, Y., *et al.* Therapeutic targeting of vascular remodeling and right heart failure in pulmonary arterial hypertension with a HIF-2 α inhibitor. *Am. J. Respir. Crit. Care Med.* **98**(11), 1423-1434 (2018).

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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