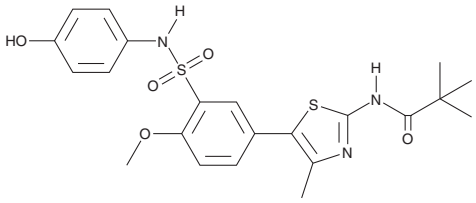
PRODUCT INFORMATION

PI4KIIIβ-IN-10

Item No. 46689

CAS Registry No.: 1881233-39-1
Formal Name: N-[5-[3-[[(4-hydroxyphenyl)amino] sulfonyl]-4-methoxyphenyl]-4-methyl-2-thiazolyl]-2,2-dimethyl-propanamide
Synonym: PI4KIIIβ Inhibitor 10
MF: $C_{22}H_{25}N_3O_5S_2$
FW: 475.6
Purity: ≥95%
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

PI4KIIIβ-IN-10 is supplied as a solid. A stock solution may be made by dissolving the PI4KIIIβ-IN-10 in the solvent of choice, which should be purged with an inert gas. PI4KIIIβ-IN-10 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

PI4KIIIβ-IN-10 is an inhibitor of PI4KIIIβ (IC_{50} = 0.0036 µM).[1] It is selective for PI4KIIIβ over PI3Kγ, PI3Kδ, and vacuolar protein sorting 34 (VPS34; IC_{50}s = ~20, 0.72, and >20 µM, respectively). PI4KIIIβ-IN-10 inhibits the replication of hepatitis C virus (HCV) in a reporter assay using Huh7.5 cells (IC_{50} = 1.3 µM). PI4KIIIβ-IN-10 reduces muscle endosome accumulation and crawling defects in *Drosophila* expressing a null mutation in Vap33, a homolog of a mutated protein found in patients with amyotrophic lateral sclerosis type 8 (ALS8).[2] It also reduces BODIPY-labeled C5 ceramide transport from the endoplasmic reticulum (ER) to the Golgi in HeLa cells in a ceramide transport protein (CERT)-dependent manner at 25 and 50 nM.[3]

References

1. Rutaganira, F.U., Fowler, M.L., McPhail, J.A., *et al.* Design and structural characterization of potent and selective inhibitors of phosphatidylinositol 4 kinase IIIβ. *J. Med. Chem.* **59(5)**, 1830-1839 (2016).
2. Mao, D., Lin, G., Tepe, B., *et al.* VAMP associated proteins are required for autophagic and lysosomal degradation by promoting a PtdIns4P-mediated endosomal pathway. *Autophagy* **15(7)**, 1214-1233 (2019).
3. Crivelli, S.M., Giovagnoni, C., Zhu, Z., *et al.* Function of ceramide transfer protein for biogenesis and sphingolipid composition of extracellular vesicles. *J. Extracell. Vesicles* **11(6)**, e12233 (2022).

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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