



# **Data Sheet**

 Product Name:
 QS11

 Cat. No.:
 CS-6989

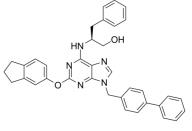
 CAS No.:
 944328-88-5

 Molecular Formula:
 C36H33N5O2

Molecular Weight: 567.68
Target: Others
Pathway: Others

Solubility: H2O :  $< 0.1 \text{ mg/mL (insoluble)}; DMSO : <math>\ge 100 \text{ mg/mL (176.16)}$ 

mM)



### **BIOLOGICAL ACTIVITY:**

QS11 is a GTPase activating protein of ADP-ribosylation factor 1 (ARFGAP1) inhibitor. **In Vitro**: QS11 binds and inhibits the GTPase activating protein of ADP-ribosylation factor 1 (ARFGAP1), suggesting that QS11 modulates Wnt/ $\beta$ -catenin signaling through an effect on protein trafficking. QS11 (2.5  $\mu$ M) activates the Super(8X)TOPFlash reporter 200-fold in the presence of Wnt-3a CM, whereas Wnt-3a treatment alone increases reporter activity 40-fold. QS11 increases reporter activity only 2-fold in the absence of Wnt-3a. QS11 shows potent activity (EC<sub>50</sub>=0.5  $\mu$ M) with little cytotoxicity toward HEK293 and human primary fibroblast cells. QS11 effectively reduces in vitro migration of metastatic human breast cancer cells<sup>[1]</sup>.

# PROTOCOL (Extracted from published papers and Only for reference)

Cell Assay: <sup>[1]</sup>ARF-GTP levels are measured by using the GGA binding assay. NIH 3T3 cells are treated with QS11 or QS11-NC at the indicated concentrations for 36 h. Cells are lysed in ARF assay lysis buffer [50 mM Tris·HCl (pH 7.5), 100 mM NaCl, 2 mM MgCl<sub>2</sub>, 0.1% SDS, 0.5% sodium deoxycholate, 1% Triton X-100, 10% glycerol, and protease inhibitors]. GTP-bound ARF is assayed by its binding to a GST fusion protein, which contains the VHS domain to the GAT region of an ARF effector GGA3<sup>[1]</sup>.

#### References:

[1]. Zhang Q, et al. Small-molecule synergist of the Wnt/beta-catenin signaling pathway. Proc Natl Acad Sci U S A. 2007 May 1;104(18):7444-8.

## **CAIndexNames:**

Benzenepropanol,  $\beta$ -[[9-([1,1'-biphenyl]-4-ylmethyl)-2-[(2,3-dihydro-1H-inden-5-yl)oxy]-9H-purin-6-yl]amino]-, ( $\beta$ S)-

## **SMILES:**

OC[C@H](CC1=CC=CC=C1)NC2=C3C(N(CC4=CC=C(C5=CC=CC=C5)C=C4)C=N3)=NC(OC6=CC=C(CCC7)C7=C6)=N2

Caution: Product has not been fully validated for medical applications. For research use only.

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