



**S0859** 

Catalog No: tcsc1092



## **Available Sizes**

Size: 5mg

Size: 10mg

Size: 50mg



## **Specifications**

CAS No:

1019331-10-2

Formula:

 $\mathsf{C_{29}H_{24}CIN_3O_3S}$ 

**Pathway:** 

Membrane Transporter/Ion Channel

**Target:** 

Na+/HCO3- Cotransporter

**Purity / Grade:** 

>98%

**Solubility:** 

DMSO :  $\geq$  100 mg/mL (188.67 mM)

**Observed Molecular Weight:** 

530.04

## **Product Description**

S0859, an N-cyanosulphonamide compound, reversibly inhibit NBC-mediated pH(i) recovery (K (i)=1.7 microM, full inhibition at approximately 30 microM).





IC50 value:

Target: NBC

Na(+)-coupled HCO(3)(-) transporters (NBCs) mediate the transport of bicarbonate ions across cell membranes and are thus ubiquitous regulators of intracellular pH. NBC dysregulation is associated with a range of diseases; for instance, NBCn1 is strongly upregulated in a model of ErbB2-dependent breast cancer, a malignant and widespread cancer with no targeted treatment options, and single-nucleotide polymorphisms in NBCn1 genetically link to breast cancer development and hypertension. Treatment with NBC inhibitor S0859 significantly increased caspase-3 activity and elevated the number of apoptotic EC. S0859 is potentially important for probing the transporter\'s functional role in heart and other tissues.

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!