

KB-R7943 mesylate, TRPC channel blocker

Catalog	Unit
TBI1163-10MG	10 mg
TBI1163-50MG	50 mg

Product Details

Formal Name: 2-[2-[4-(4-Nitrobenzyloxy)phenyl]ethyl]isothioures mesylate

Molecular Formula: C₁₆H₁₇N₃O₃S · CH₃SO₃H

Formula Weight: 427.49

CAS Number: 182004-65-5

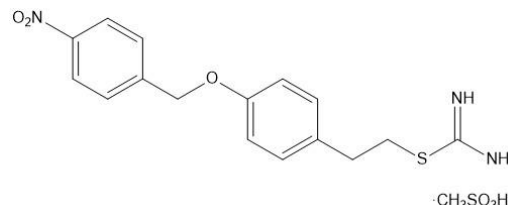
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to 50 mg/ml).

Storage: RT

Stability: ≥ 2 years.



Applications

TRPC channel blocker

Functions

KB-R7943 is a potent and selective inhibitor of the reversed Na⁺/Ca²⁺ exchanger (NCE or NCX; IC₅₀'s = 1.2-2.4 μM in cardiomyocytes, smooth muscle cells, NCX1-transfected fibroblasts; 0.7 μM in cultured rat forebrain). KB-R7943 has also been shown to inhibit the mitochondrial Ca²⁺ uniporter (MCU) – K_i = 5.5 μM. Recently shown to inhibit complex I in the mitochondrial respiratory chain (IC₅₀ = 11.4 μM) and block NMDA receptors (IC₅₀ = 13.4 μM).

Application Procedures

First dissolved in DMSO (up to 50 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.