

ISRIB, Integrated stress response inhibitor

Catalog	Unit
TBI1539-5MG	5 mg
TBI1539-25MG	25 mg

Product Details

Formal Name: N,N'-trans-1,4-Cyclohexanediylbis[2-(4-chlorophenoxy)acetamide]

Alternate Names: trans-ISRIB

Molecular Formula: C₂₂H₂₄Cl₂N₂O₄

Formula Weight: 451.34

CAS Number: 1597403-47-8

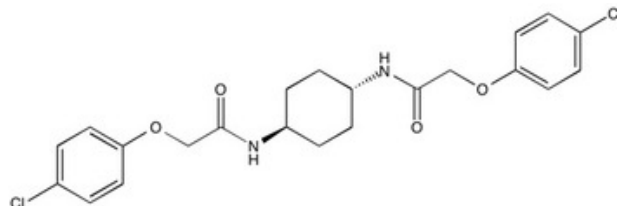
Purity: >98%

Formulation: powder

Solubility: DMSO (up to 5 mg/ml with warming)

Storage: -20°C

Stability: ≥ 1 year.



Applications

Integrated stress response inhibitor

Functions

Integrated stress response inhibitor. Potently reverses the effects of initiation factor 2 α (eIF2 α) phosphorylation, IC₅₀=5 nM. Enhances spatial and fear-associated learning in mice and enhances cognitive function. Mechanism of action involves activation of eIF2 β .3 Suppresses ER stress-induced inflammatory gene expression. Potently attenuates amyloid β -induced neuronal cell death (12.5-25 nM) with no effect on amyloid β production. Reverses hippocampal-dependent cognitive deficits induced by traumatic brain injury in two different injury mouse models.

Application Procedures

First dissolved in DMSO (up to 5 mg/ml with warming), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 3 months.

For research use only.