

Metolazone, UPR activator and longevity inducer

Catalog	Unit
TBI5417-50MG	50 mg
TBI5417-250MG	250 mg

Product Details

Formal Name: 7-Chloro-1,2,3,4-tetrahydro-2-methyl-3-(2-methylphenyl)-4-oxo-6-quinazolinesulfonamide

Alternate Names: SR 720-22

Molecular Formula: C₁₆H₁₆ClN₃O₃S

Formula Weight: 365.80

CAS Number: 17560-51-9

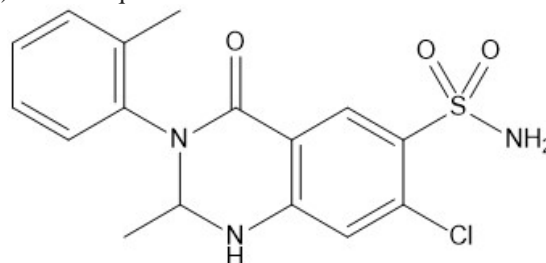
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (36 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

UPR activator and longevity inducer

Functions

Activates mitochondrial unfolded protein response (UPR^{MT}) and increases *C. elegans* lifespan. Clinically useful diuretic that inhibits the thiazide-sensitive Na⁺-Cl⁻ cotransporter (NCC) (IC₅₀ = 0.3 μM rat), blocking sodium reabsorption. Metolazone also inhibits human carbonic anhydrase isoforms VII, XII, and XIII with nanomolar potency.

Application Procedures

First dissolved in DMSO (36 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored desiccated at -20°C for up to 2 months.

For research use only.