

AR7, Activates chaperone mediated autophagy

Catalog	Unit
TBI5515-5MG	5 mg
TBI5515-25MG	25 mg

Product Details

Formal Name: 7-Chloro-3-(4-methylphenyl)-2H-1,4-benzoxazine

Molecular Formula: C₁₅H₁₂ClNO

Formula Weight: 257.70

CAS Number: 80306-38-3

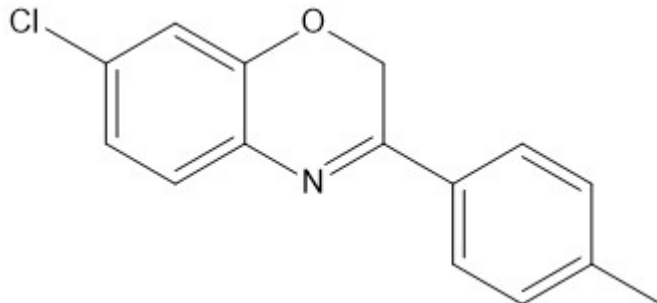
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (30 mg/ml)

Storage: -20°C

Stability: ≥ 2 years.



Applications

Activates chaperone mediated autophagy

Functions

Atypical retinoid that acts as an RAR α antagonist and activates chaperone-mediated autophagy (CMA) via an RAR-dependent pathway. Downstream signaling results in an increase of LAMP-2A expression. Cells pretreated with AR7 had markedly improved viability in a paraquat-induced oxidative stress model. AR7 stimulated CMA and attenuated accumulation of SNCA oligomers in prolonged cultures of mutant cortical neurons² indicating that CMA activation may be a viable disease-modifying strategy in Parkinson's disease. A targetome analysis of AR7-induced CMA in cancer cells has been performed.

Application Procedures

First dissolved in DMSO (30 mg/ml), then diluted to aqueous buffer. Solutions in DMSO may be stored at -20°C for up to 1 month.

For research use only.