

Dyclonine, Mitochondrial function enhancer

Catalog	Unit
TBI3895-500MG	500 mg
TBI3895-2G	2 g

Product Details

Formal Name: 4'-Butoxy-3-piperidinopropiophenone, hydrochloride

Alternate Names: Dyclocaine

Molecular Formula: C₁₈H₂₇NO₂ • HCl

Formula Weight: 325.90

CAS Number: 536-43-6

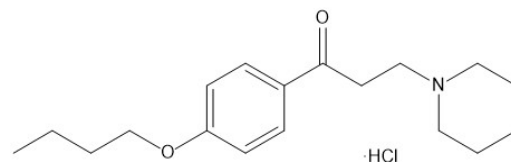
Purity: >98%

Formulation: powder

Solubility: Soluble in DMSO (up to at least 20 mg/ml) or water (up to at least 25 mg/ml)

Storage: RT

Stability: ≥ 2 years.



Applications

Mitochondrial function enhancer

Functions

A topical anesthetic which has been used for oral and throat analgesia. Enhances neuronal mitochondrial function, potentiating respiration and providing protection against insults associated with neurodegenerative disorders. Inhibits aldehyde dehydrogenase ALDH3A1 resulting in accumulation of 4-hydroxynonenal, which renders head and neck squamous cell carcinoma cells sensitive to the cystine-glutamate antiporter inhibitor, sulfasalazine. Rescues frataxin deficiency in animal models as well as in buccal cells of patients with Friedreich's Ataxia. Enhances the cytotoxic effect of proteasome inhibitors MG-132 and bortezomb in cancer cells.

Application Procedures

First dissolved in DMSO (up to at least 20 mg/ml) or water (up to at least 25 mg/ml), then diluted to aqueous buffer. Solutions in DMSO or distilled water may be stored at -20°C for up to 2 months.

For research use only.