FT-221055

Chlortalidone

Product description

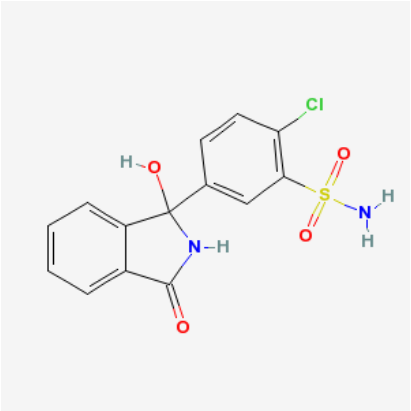
Name: **Chlortalidone , Biotech grade**
Chlorthalidone, a1-oxo-isoindoline, phthalamidine

Catalog #: 221055, 5g

Formula: $C_{14}H_{11}ClN_2O_4S$
Molecular Weight: 338.76 g/mol
CAS: 77-36-1
Purity: min 98 %
Melting Point: 224-226 °C

Storage: Room Temperature (Z)

For Research Use Only



Technical information

Chlortalidone (INN/BAN) or chlorthalidone (USAN) is a phthalimide derivate, thiazide-like diuretic agent (acts similarly to the thiazides but does not contain the benzothiadiazine molecular structure). Although it exists primarily in the phthalamidine form, the ring may be opened to form a benzophenone derivative. This illustrated its structural analogies to quinazolinines'.

Chlortalidone is a bioactive compound acting on Na+-Cl~ symporter. It increases the excretion of sodium, chloride, and water into the renal lumen by inhibiting sodium ion transport across the renal tubular epithelium. Its primary site of action is in the cortical diluting segment of the ascending limb of the loop of Henle.

The Chlorthalidone is used as a drug, helping against retention of liquids (oedema) that accompany cardiac insufficiency and disfunction of liver and kidney, as well as for arterial hypetension. It stimulates the elimination of excessive water and salt quantities from organism (dose at 12-100mg/day; bioavailability >90% var.; peak plasma: 4Hr; T1/2: 35-50h; Effect duration: 48-72h; Elimination route: 30-60% by Urine)'. Compared with other medications of the thiazide class, chlorthalidone has the longest duration of action with a similar diuretic effect (no loop diuretics).

References

Comparative antihypertensive effects of hydrochlorothiazide and chlorthalidone on ambulatory and office blood pressure. Ernst ME et al., Hypertension. 2006 Mar;47(3):321-2. Article
Foye's principles of medicinal chemistry Par David A. Williams,William O. Foye,Thomas L. Lemke, Book.

Other Bioactive compounds:

▪ **Transporters**: ▪ 5-HT Transporters ▪ Acetylcholine Transporters ▪ Adrenergic Transporters ▪ Cannabinoid Transporters ▪ Dopamine Transporters ▪ GABA Transporters ▪ Glucose Transporters ▪ Glutamate (EAAT) Transporters ▪ Glycine Transporters ▪ Ion Pumps/Transporters ▪ Multidrug Transporters ▪ Neurotransmitter Transporters ▪ Nucleoside Transporters ▪ Other Ion Pumps/Transporters ▪ Vesicular Monoamine Transporters ▪ Blood-Brain Barrier Transporters ▪ **BioActive compounds search**[], i.e. Neurotoxins (Brevetoxins PbTx 673030); Trk Receptor Agonists (LM22A4 673030)

Other Information

For in vitro R&D use only
Disclaimer : Materials from Uptima are sold **for research use only**, and are not intended for food, drug, household, or cosmetic use. Interchim is not liable for any damage resulting from handling or contact with this product.

Please contact InterBioTech – Interchim for any other information

RevN096E, J09E

Contact your local distributor

interbiotech@interchim.com

InterBioTech, powered by
interchim
213 Avenue J.F. Kennedy - BP 1140
03103 Montluçon Cedex - France
Tél. 04 70 03 88 55 - Fax 04 70 03 82 60