Calmidazolium (chloride)
Item No. 14442

CAS Registry No.: 57265-65-3
Formal Name: 3-[bis(4-chlorophenyl)methyl]-1-[2-(2,4-dichlorophenyl)-2-[2-(2,4-dichlorophenyl)methoxy]ethyl]-1H-imidazolium, monochloride
Synonym: R 24571
MF: C_{31}H_{23}Cl_{6}N_{2}O • Cl
FW: 687.7
Purity: ≥98%
Stability: ≥6 months at 4°C
Supplied as: A white to off-white solid

Laboratory Procedures
For long term storage, we suggest that calmidazolium (chloride) be stored as supplied at 4°C. It should be stable for at least six months.

Calmidazolium (chloride) is supplied as a white to off-white solid. A stock solution may be made by dissolving the calmidazolium (chloride) in the solvent of choice. Calmidazolium (chloride) is soluble in organic solvents such as ethanol and DMSO, which should be purged with an inert gas. The solubility of calmidazolium (chloride) in these solvents is approximately 100 mM.

Calmidazolium (chloride) is an inhibitor of calmodulin (CaM), inhibiting CaM-dependent phosphodiesterase and CaM-induced activation of erythrocyte calcium-transporting ATPase (IC_{50} = 0.15 and 0.35 µM, respectively). It also inhibits an array of calcium-transporting ATPases, including those from heart and skeletal muscle (IC_{50} = 2.1 and 2.9 µM, respectively). It also induces the influx of extracellular calcium through store-operated calcium channels (EC_{50} = 3 µM).

References

Related Products
For a list of related products please visit: www.caymanchem.com/catalog/14442