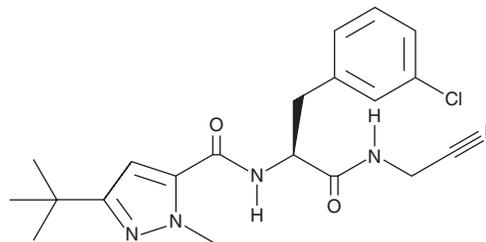# PRODUCT INFORMATION

Cayman CHEMICAL

Cathepsin Inhibitor 1
Item No. 28790

CAS Registry No.: 225120-65-0
Formal Name: N-[(1S)-1-[(3-chlorophenyl) methyl]-2-[(cyanomethyl)amino]- 2-oxoethyl]-3-(1,1-dimethylethyl)- 1-methyl-1H-pyrazole-5- carboxamide
MF: $C_{20}H_{24}ClN_5O_2$
FW: 401.9
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Cathepsin inhibitor 1 is supplied as a solid. A stock solution may be made by dissolving the cathepsin inhibitor 1 in the solvent of choice, which should be purged with an inert gas. Cathepsin inhibitor 1 is soluble (≥10 mg/ml) in ethanol and DMSO.

Description

Cathepsin inhibitor 1 is an inhibitor of cathepsin L (IC_{50} = 12.58 nM).[1] It is selective for cathepsin L over cathepsin L2, cathepsin S, cathepsin K, and cathepsin B (IC_{50}s = 199.53, 1,000, 3,162.27, and 6,309.57 nM, respectively).

Reference

1. Assad, N., Bethel, P.A., Coulson, M.D., *et al.* Dipeptidyl nitrile inhibitors of cathepsin L. *Bioorg. Med. Chem. Lett.* **19(15)**, 4280-4283 (2009).