

Catalog # 10-2290 TPCK

CAS# 402-71-1 N-p-Tosyl-L-phenylalanine chloromethyl ketone Lot # X101719

TPCK is an irreversible inhibitor of the serine protease chymotrypsin.¹ It also inhibits certain cysteine proteases (bromelain, ficin, papain).¹ TPCK inhibited (IC₅₀ = 5 μ M) the mitogen-induced activation of pp70s6k, a mitogen-regulated serine/threonine kinase involved in the G1 to S phase transition of the cell cycle.²

- 1) Bond and Butler, (1987) Intracellular proteases Annu.Rev.Biochem. 56 333
- 2) Grammer and Blenis (1996) The serine protease inhibitors, tosylphenylalanine chloromethylketone and tosyllysine chloromethylketone, potently inhibit pp70s6k activation J.Biol.Chem **271** 23650

PHYSICAL DATA

Molecular Weight: 351.85

Molecular Formula: $C_{17}H_{18}CINO_3S$ Purity: >98% by TLC NMR: (Conforms)

Solubility: DMSO (at least 10 mg/mL))

Physical Description: White solid

Storage and Stability: Store as supplied at -20°C for up to 1 year from the date of purchase. Solutions in

DMSO may be stored at -20°C for up to 3 months.

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