MATERIAL DATA SHEET

Ac-Leu-Leu-Met-CHO (Ac-LLM-CHO) Cat. # I-170

Peptide aldehydes form a covalent hemiacetal adduct with the 20S proteasome, inhibiting the chymotrypsin-like peptidase activity. These inhibitors are reversible and cell-permeable, and also inhibit the activity of calpains and cathepsins.

Product Information

Quantity: 5 mg

Formula: $C_{19}H_{35}N_3O_4S$ **FW:** 401.57

Structure:

Physical/Chemical Characteristics

Solubility: Soluble in DMSO up to 15 mg/ml. Pellet dry compound prior to DMSO

addition.

Purity: >95% by HPLC and TLC. Structure confirmed by NMR.

Use & Storage

Use: Add from DMSO stock directly to *in vitro* or *in vivo* assay at desired

concentration. Pre-incubation with compound prior to assay is recommended

for maximal effect.

Storage: Store DMSO stock at -20°C. Avoid multiple freeze/thaw cycles.

Literature

References: Griscavage, J.M., et al. (1995) <u>Biochem. Biophys. Res. Comm.</u> **215**:721729

Kisselev A.F., *et al.* (2003) <u>J. Biol. Chem.</u> **278**:35869-35877 Mellgren R.L. (1997) <u>J. Biol. Chem.</u> **272**:29899-29903 Myung J., *et al.* (2001) <u>Med. Res. Rev.</u> **4**:245-273 Vinitsky A., *et al.* (1994) <u>J. Biol. Chem.</u> **269**:29860-29860

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