

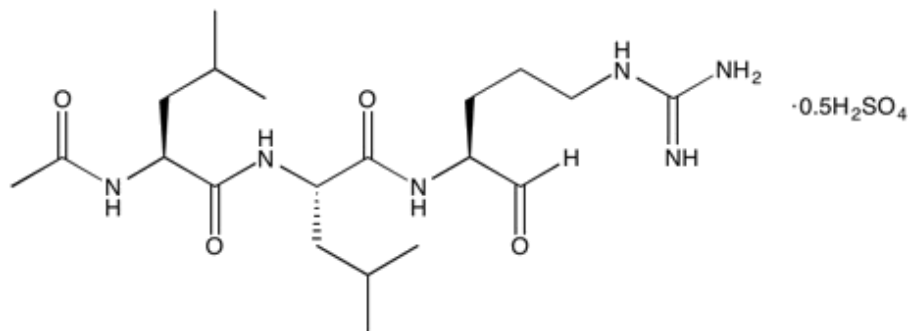
**Catalog # 10-1346**

**Leupeptin hemisulfate**

CAS# 103476-89-7

Ac-Leu-Leu-Arg-CHO, hemisulfate

Lot # X101476



A reversible inhibitor of trypsin-like proteases and cysteine proteases. Inhibits trypsin, plasmin, papain and cathepsin B, H and L.<sup>1-3</sup> Blocks various apoptotic pathways in T cells.<sup>4</sup> Commonly used in cell lysis buffers to protect proteins from degradation. Typical working concentration is 1  $\mu$ M (0.5  $\mu$ g/ml).

- 1) Aoyagi *et al.* (1969), *Leupeptins, new protease inhibitors from Actinomycetes*; J. Antibiot., **22** 283
- 2) Barrett *et al.* (1981), *Cathepsin B, Cathepsin H and Cathepsin L*; Methods Enzymol., **Pt C, 80** 535
- 3) Knight *et al.* (1980), *Human cathepsin B. Application of the substrate N=benzyloxycarbonyl-L-arginyl-L-arginine 2-naphthylamide to a study of the inhibition by leupeptin*; Biochem. J., **189** 447
- 4) Sarin *et al.* (1995), *A protease-dependent TCR-induced death pathway in mature lymphocytes*; J. Immunol., **154** 5806

**PHYSICAL DATA**

Molecular Weight:	475.59
Molecular Formula:	C <sub>20</sub> H <sub>38</sub> N <sub>6</sub> O <sub>4</sub> • 1/2H <sub>2</sub> SO <sub>4</sub>
Purity:	98% by HPLC
	NMR: (Conforms)
Solubility:	Water (up to 50 mg/ml), also soluble in ethanol and methanol
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 water, ethanol or methanol may be stored at -20°C for up to 3 months.

**Materials provided by Focus Biomolecules are for laboratory research use only and are not intended for human or veterinary applications.**