

## Catalog # 10-2734 Antipain 2HCI

CAS# 37682-72-7

(S)-1-Carboxy-2-phenylethyl]carbamoyl-L-arginyl-L-valyl-argininal, dihydrochloride Lot # X101145

Serine/cysteine protease inhibitor. Also inhibits some trypsin-like proteases.<sup>1</sup> May be used as an additive to prevent proteolytic activity during recombinant protein production in Sf-9 insect cell cultures.<sup>2</sup> May be employed in the characterization of newly discovered proteases.<sup>3,4</sup> Blocks autophagy in cultured tobacco cells and may be used in an assay for autophagy in plant cells.<sup>5</sup>

- 1) Umezawa et al. (1976), Structures and activities of protease inhibitors of microbial origin; Method Enzymol., 45 678
- 2) Gotoh et al. (2001), Proteolytic activity and recombinant protein production in virus-infected Sf-9 insect cell cultures supplemented with carboxyl and cysteine protease inhibitors; J. Biosci. Bioeng., **92** 248
- 3) Hockensmith et al. (2016), Identification and characterization of a chymotrypsin-like serine protease from periodontal pathogen, Tannerella forsythia; Microb. Pathog., **100** 37
- 4) Mat Amin et al. (2004), Proteinases in Naegleria Fowleri (strain NF3), a pathogenic amoeba: a preliminary study.; Trop. Biomed., **21** 57
- 5) Moriyyasu & Inoue (2008), Use of protease inhibitor for detecting autophagy in plants; Methods Enzymol., 451 557

## **PHYSICAL DATA**

Molecular Weight: 677.62

Solubility:

Molecular Formula: C<sub>27</sub>H<sub>44</sub>N<sub>10</sub>O<sub>6</sub> • 2HCl Purity: 98% by HPLC NMR: (Conforms)

Soluble in Water (up to at least 10 mg/ml)

Physical Description: White solid

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

Solutions in distilled water may be stored at -20°C for up to 1 month.

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