

# Pepstatin A

Cat. # P1054-10, P1054-50

<b>Also Known as:</b>	N/A
<b>Formula:</b>	$C_{34}H_{63}N_5O_9$
<b>MW:</b>	685.9 g/mol
<b>CAS No.:</b>	26305-03-3
<b>Source:</b>	Synthetic
<b>Form:</b>	Powder
<b>Solubility:</b>	DMSO: 10 mg/ml
<b>Quality Assurance:</b>	≥98% purity
<b>Description:</b>	Pepstatin A is an irreversible inhibitor of aspartic acid proteases, including pepsin, cathepsin D, cathepsin E, chymosin, and HIV proteases. It inhibits lysosomal proteases and autophagy. Typical working concentration is 1 μM.
<b>Storage:</b>	Eligible for room temperature shipping. Store at -20°C upon receiving; avoid multiple freeze-thaw cycles after dissolving in buffer.
<b>Stock Solution Preparation:</b>	100X or 1000X stock solution preparation (after fully dissolved, aliquot to small volume, and store at -20 °C). <ul style="list-style-type: none"><li>- Aprotinin (catalog # P1053): Dissolve 20 mg in 10 ml of water or PBS to get 2 mg/ml stock (1000X). Working concentration is 2 μg/ml.</li><li>- Leupeptin Hemisulfate (catalog # P1057): Dissolve 10 mg in 2.1 ml of DMSO or water to get 10 mM stock (1000X). Working concentration is 10 μM.</li><li>- Pepstatin A (catalog # P1054): Dissolve 5 mg in 7.3 ml of DMSO to get 1 mM stock (1000X). Working concentration is 1 μM.</li><li>- AEBSF HCl (catalog # P1056): Dissolve 10 mg in 0.416 ml of DMSO to get 100 mM stock (100X). Working concentration is 1mM.</li><li>- Bestatin (catalog # P1055): Dissolve 5 mg in 16.2 ml DMSO to get 1 mM stock (1000X). Working concentration is 1 μM.</li><li>- E-64D (catalog # P1051): Dissolve 5 mg in 1.4 ml DMSO to get 10 mM stock (1000X). Working concentration is 10 μM.</li></ul>
<b>Literature:</b>	<ol style="list-style-type: none"><li>1. Umezawa H., et al. J. Antibiot. 1970, 23, 259.</li><li>2. Deiss L P., et al. EMBO J. 1996, 15, 3861.</li></ol>