Creative Enzymes®

Metalloproteinase from Staphylococcus aureus

Cat. No. NATE-1617

Lot. No. (See product label)

Introduction

Description	A metalloproteinase, or metalloprotease, is any protease enzyme whose catalytic mechanism involves a metal. An example of this would be meltrin which plays a significant role in the fusion of muscle cells during embryo development, in a process known as myogenesis. Most metalloproteases require zinc, but some use cobalt. The metal ion is coordinated to the protein via three ligands. The ligands co-ordinating the metal ion can vary with histidine, glutamate, aspartate, lysine, and arginine. The fourth coordination position is taken up by a labile water molecule. Treatment with chelating agents such as EDTA leads to complete inactivation. EDTA is a metal chelator that removes zinc, which is essential for activity. They are also inhibited by the chelator orthophenanthroline.
Applications	Enzyme used for structural and enzymological studies. Specificity similar to that of thermolysin with preference to hydrophobic P1' residues.
Synonyms	Aureolysin

Product Information

Source	Staphylococcus aureus
Form	Lyophilized from 20 mM Tris/HCl pH 7.8, containing 5-10 mM CaCl2 .
EC Number	EC 3.4.24.29
CAS No.	39335-13-2
Molecular Weight	28000
Purity	> 95 % (SDS-PAGE)

Storage and Shipping Information

Storage	at -15 °C to -25 °C