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 $CaCl_2$ .

***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