

## equine arterivirus serine peptidase

Cat. No. EXWM-4109

Lot. No. (See product label)

### Introduction

#### Description

In the equine arterivirus (EAV), the replicase gene is translated into open reading frame 1a (ORF1a) and ORF1ab polypeptides. This enzyme is the main viral proteinase and processes five cleavage sites in the ORF1a protein and three in the ORF1b-encoded part of the ORF1ab protein to yield nonstructural proteins (nsp5-nsp12). It combines the catalytic system of a chymotrypsin-like serine peptidase (His-Asp-Ser catalytic triad) with the substrate specificity of a 3C-like serine peptidase (Glu or Gln) at the P1 position and a small amino-acid residue (Gly, Ser or Ala) at the P1' position. Cleavage of ORF1ab by this enzyme is essential for viral replication. Belongs in peptidase family S32.

### Product Information

**Form** Liquid or lyophilized powder

**EC Number** EC 3.4.21.114

**Reaction** Cleavage of (Glu/Gln)- $\downarrow$ -(Gly/Ser/Ala) in arterivirus replicase translation products ORF1a and ORF1ab

**Notes** This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

### Storage and Shipping Information

**Storage** Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.