

S2P endopeptidase

Cat. No. EXWM-4369

Lot. No. (See product label)

Introduction

Description

Type example of peptidase family M50. The transcription factors SREBP-1 and -2 are synthesized as precursor proteins that are attached to the membranes of the endoplasmic reticulum and two cleavages are needed to release the active factor so that it can move to the nucleus. This enzyme cleaves the second of these, and is thus the "site 2 protease", S2P.

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 3.4.24.85

CAS No.

752251-31-3

Reaction

Cleaves several transcription factors that are type-2 transmembrane proteins within membrane-spanning domains. Known substrates include sterol regulatory element-binding protein (SREBP) -1, SREBP-2 and forms of the transcriptional activator ATF6. SREBP-2 is cleaved at the site DRSRILL483CVLTFCLSFNPLTSLLQWGGA, in which the membrane-spanning segment is underlined. The residues NP (bold), 11 residues distal to the site of cleavage in the membrane-spanning domain, are important for cleavage by S2P endopeptidase. Replacement of either of these residues does not prevent cleavage, but there is no cleavage if both of these residues are replaced.

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.