

DATASHEET

VBS

Vinculin Binding Site from Talin
(≥ 98% purity)

For Use in Research Only.
Not for Use in Diagnostic Processes.

Quantity: 1x200 µg
Cat. #: 8317-01

Product Description

Vinculin is autoinhibited by the head/tail interaction of the protein. This inhibition can be released by several ligands, such as PIP2 and talin. VBS is a 2.9 kDa peptide which derives from the C-terminal talin sequence and was shown to release the head/tail interaction of vinculin by binding to the vinculin head (Vh). The vinculin molecule opens and exposes e.g. ligand binding sites in the vinculin tail (Vt) region.

PIP2 and actin binding have been shown to be mutually exclusive (Steimle et al., 1999, J. Biol. Chem.), while binding of VBS opens the vinculin molecule without impairing actin binding (Bass et al., 2002, Biochem J.). Activation of vinculin molecules is achieved by adding a 30-100 fold molar excess of VBS to vinculin (Witt et. al., 2004, J. Biol. Chem.). The activation of vinculin by talin to connect the actin cytoskeleton to the plasma membrane is thought to be one of the key mechanisms for focal adhesion assembly.

Product Handling

Preparation of a working stock

Add 20µl of H₂O to the tube containing VBS to obtain a working stock of 10mg/ml or add H₂O according to experimental demands. Leave the protein to rehydrate for 2min at room temperature and spin at 13.000xg, 30 secs to concentrate the solution on the bottom of the tube. VBS is supplied as a pure peptide in H₂O.

Product Storage and Stability

The highest product performance is achieved when stored at -70° upon arrival, where it will be stable for at least 6 months. Once dissolved, VBS is kept on ice and will be stable for at least two weeks.

HYPERMOL EK WARRANTS THAT ITS PRODUCTS ARE CONFORM TO THE INFORMATION CONTAINED IN THIS PUBLICATION. THE PURCHASERS MUST DETERMINE THE SUITABILITY OF THE PRODUCT(S) FOR THEIR PARTICULAR USE. ADDITIONAL TERMS AND CONDITIONS MAY APPLY (SEE REVERSE SIDE OF THE INVOICE). HYPERMOL BRANDS ARE SOLD EXCLUSIVELY BY HYPERMOL EK, GERMANY AND AUTHORIZED DISTRIBUTORS.

For product inquiries please contact:

cusserv@hypermol.com
Fon: +49 (0)521 9876228
Fax: +49 (0)521 9876231
www.hypermol.com