
DSTN Antibody Blocking Peptide

Catalog Number: bs-12997P

Activity: Not tested

Purification: HPLC

Storage: Shipped at 4°C. Stored at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Actin-depolymerizing factor (ADF), also known as destrin, is a member of the ADF/Cofilin/destrin superfamily that has the ability to rapidly depolymerize F-Actin in a stoichiometric manner. The Actin-depolymerizing activity of ADF is reversibly controlled by changes in KCl concentration but is insensitive to calcium concentration. ADF depolymerizes F-Actin by interacting directly with F-Actin protomers. ADF shares 71% sequence homology with Cofilin, however the two proteins differ in their interaction with Actin. The difference in the function of ADF and Cofilin results from the subtle difference in their amino acid sequence rather than possible differences in posttranslational modifications. As a result of different cleavage sites on ADF and Cofilin, the proteins differ in their overall tertiary folds. Sensitivity to polyphosphoinositides may be a common feature in vitro among Actin-binding proteins such as ADF and Cofilin that can bind to G-Actin and regulate the state of Actin polymerization. ADF and Cofilin are Actin-depolymerizing proteins whose activities are possibly regulated by their phosphorylation/dephosphorylation.