Product Datasheet

Product Description

Product: ATA-Phe-Pro-Arg-CMK

Catalog Number: IINFPRCK

Description: ATA-FFRCK (Na-[(acetylthio) acetyl]-D-Phe-Phe-Arg-CH2Cl) and ATA-FPRCK (Na-[(acetylthio)acetyl]-D-Phe-Pro-Arg-CHCl2) are active-site specific labeling reagents for serine proteases. They are derivatized from irreversible peptide chloromethyl ketones and facilitate incorporation of a thioester moiety via alkylation of the catalytic site Histidine residue. Liberation of the free thiol group is accomplished by gentle treatment with hydroxylamine (NH2OH) following irreversible incorporation into the enzyme catalytic site. The free thiol then becomes a site for specific modifications with thiol-reactive probes such as iodoacetamide fluorescent probes. Many serine proteases in which free thiols are lacking may be specifically labeled at the active site by these reagents. Both ATA-FPRCK and ATA-FFRCK have been used to label thrombin with 5-(iodoacetamido) fluorescein (5-IAF). The probe was then effectively utilized to follow conformational changes in the catalytic domain of alpha-thrombin upon binding to the fragment 2 domain of prothrombin. In addition, quantitative equilibrium binding studies and investigations into the kinetics underlying the non-proteolytic activation of the zymogen plasminogen by streptokinase were characterized with 2-((4'-iodoacetamido) anilino) naphthalene-6-sulfonic acid (IAANS) labeled plasminogen by using the ATA-FFRCK reagent. References: 1. Bock, P. (1993) Method Enzymol. 222:478-503. 2. Bock, P. et al. (1996) J Biol. Chem. 271:1072-1080.

Source: Chemical

Sample Characteristics

Lot Number: SAMPLE

Aliquot: 1 x 0.1 mg

Form: Frozen liquid

Shipping Information

Recommended Storage: -70 C

Shipping Conditions: Dry ice

Minimum Shelf Life: 3 years from delivery

For In Vitro laboratory use only

Innovative Research, Inc. - 46430 Peary Court, Novi, MI 48377, USA - Tel: (888) 660-6866 - Fax: (248) 896-0149 - helpdesk@innov-research.com