Creative Enzymes®

Native Fig tree latex Ficin

Cat. No. NATE-0255

Lot. No. (See product label)

Introduction

Description Ficin is classified as a thiol protease. It contains a single reactive cysteine at its active site. The amino acid homology of the active site is similar to that of papain. Ficin will cleave proteins at the carboxyl side of Gly, Ser, Thr, Met, Lys, Arg, Tyr, Ala, Asn, and Val. The reported Km for the chromogenic substrate pGlu-Phe-Leu-p-nitroanilide is 0.43 mM. Ficin is inhibited by iodoacetamide, iodoacetic acid, N-ethylmaleimide, mercuric chloride, DFP (diisopropyl fluorophosphate), TLCK (Na-p-Tosyl-lysine chloromethyl ketone), and TPCK (N-Tosyl-L-phenylalanine chloromethyl ketone). Ficin can be used to generate high yielding F (ab')2 fragments from mouse IgG1.

Synonyms ficin; debricin; higueroxyl delabarre; EC 3.4.22.3; 9001-33-6; ficain

Product Information

Source Fig tree latex

Form saline suspension or lyophilized powder

EC Number EC 3.4.22.3

CAS No. 9001-33-6

Molecular Weight 23.8 kDa

Activity > 1.0 units/mg protein

Specificity Extinction Coefficient: E1% = 21.0 (280 nm) pI: 9.0

Unit Definition One unit will produce a ΔA280 of 1.0 per min at pH 7.0 at 37°C when measuring TCA soluble products from casein in a final volume of 10 mL (1 cm light path).