

**AP21404AF-N****Polyclonal Antibody to Ficin - Azide Free****Quantity:** 10 mg**Concentration:** 10.0 mg/ml

**Background:** 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. (3) Ficin is inhibited by Iodoacetamide, Iodoacetic Acid, N-Ethylmaleimide, Mercuric Chloride, DFP (diisopropyl fluorophosphate), TLCK (N-alpha-p-Tosyl-lysine Chloromethyl ketone), and TPCK (N-Tosyl-L-Phenylalanine Chloromethyl Ketone). (1,2) Enzyme Commission (EC) Number: 3.4.22.3 Molecular Weight: 23.8 kDa (1). Extinction Coefficient: E1% = 21.0 (280 nm) (2)

**Host / Isotype:** Rabbit / IgG

**Immunogen:** Ficin isolated and purified from fig tree latex. Freund's complete adjuvant is used in the first step of the immunization procedure.

**Format:** **State:** Lyophilized hyperimmune IgG fraction  
**Purification:** Ammonium Sulphate Precipitation and Ion Exchange Chromatography  
**Buffer System:** PBS, pH 7.2 without preservatives and foreign proteins  
**Reconstitution:** Restore by adding 1.0 ml of sterile distilled water

**Applications:** This product is intended for use in precipitating and non-precipitating antibody-binding assays (such as e.g., ELISA and Western blotting and Immunofluorescence or Histochemical techniques), to prepare an insoluble immuno-affinity adsorbent, for labelling with a marker of choice.

**Recommended Dilutions:**

Non-precipitating antibody-binding techniques: At least 1/1,000.  
Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.

**Specificity:** This polyclonal antibody is an immunologic reagents to Ficin from fig tree latex. The reagents were evaluated for potency, purity and specificity using most or all of the following techniques: Immunoelectrophoresis, Cross-Immunoelectrophoresis, single Radial Immunodiffusion (Ouchterlony), block titration, ELISA, Immunoblotting and Enzyme Inhibition. Cross-reactivities against enzymes of other sources may occur but have not been determined.

**Storage:**

Store the antibody lyophilized at 2-8°C and reconstituted at 2-8°C for one week or (in aliquots) at -20°C for longer.

If a slight precipitation occurs upon storage, this should be removed by centrifugation.

Shelf life: one year from despatch.

**General Readings:**

1. Glazer, A. N., and Smith, E. L., in *The Enzymes*, 3rd ed., vol. III, Boyer, P. D., ed., Academic Press (New York, NY: 1971), pp. 538-542.
2. Liener, I. E., and Friedenson, B., *Ficin*. *Meth. Enzymol.*, 19, 261-273 (1970).
3. Filippova, I. Y., et al., L-Pyroglutamyl-L-phenylalanyl-L-leucine-p-nitroanilide-a chromogenic substrate for thiol proteinase assay. *Anal. Biochem.*, 143(2), 293-297 (1984).