

## OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850 UNITED STATES Phone: +1-888-267-4436 Fax: +1-301-340-8606 techsupport@origene.com

## OriGene Technologies GmbH

Schillerstr. 5 32052 Herford GERMANY Phone: +49-5221-34606-0 Fax: +49-5221-34606-11 info-de@origene.com

## AP21404BT-N Polyclonal Antibody to Ficin - Biotin

Quantity: 1 ml

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

Label: Biotin

Molar Ratio: Biotin/IgG ~ 6.0

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). 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.



## AP21404BT-N: Polyclonal Antibody to Ficin - Biotin

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-Lphenylalanyl-L-leucine-p-nitroanilide-a chromogenic substrate for thiol proteinase assay. Anal. Biochem., 143(2), 293-297

(1984).