

**Product No. K-4252**

**Lot 116H4853**

**Anti-Keratin**

Developed in Guinea Pig  
Delipidized, Whole Antiserum

Anti-Keratin is developed in guinea pig using keratin isolated from fetal bovine hooves as the immunogen. The antiserum has been treated to remove lipoproteins. Guinea Pig Anti-Keratin is supplied as a liquid containing 0.1% sodium azide (see MSDS)\* as a preservative.

**Specificity**

Guinea Pig Anti-Keratin specifically stains networks of tonofilaments within epithelial cells in culture and in tissue sections. It does not react with mesenchymal, glial, neuronal or muscle cells. These antibodies show a wide cross-reactivity among species indicating that different keratins are immunologically related.

**Protein Concentration:** 45 mg/ml by biuret.

**Working Dilution**

A dilution of 1:20 was determined by indirect immunofluorescent labeling of formalin-fixed, paraffin-embedded sections of human skin and bovine muzzle.

In order to obtain best results it is recommended that each individual user determine their working dilution by titration assay.

**Description**

A wide variety of cells contain, in addition to microtubules and microfilaments, another type of fibrous skeletal element which are classified under the category of "intermediate-sized" filaments. These intermediate sized filaments are stable *in vivo* and show a biochemical heterogeneity which is developmentally regulated.

Each class of intermediate filament is restricted *in vivo* by tissue differentiation; keratins to epithelia, vimentin to mesenchymal cells, desmin to muscle tissues, glial fibrillary acidic protein (GFAP) to astroglia and neurofilament proteins to neurones. Unlike actin and tubulin, where molecular size is highly conserved from cell to cell and species to species, intermediate filament proteins vary greatly in size from class to class as well as species to species. Antibodies to mammalian keratins have been used in immunofluorescent studies to identify many epithelial cells in culture or in tissue sections.

**Uses**

Guinea Pig Anti-Keratin may be used to identify epithelial cells by a variety of immunolabelling techniques.

**Storage**

For continuous use, store at 2-8°C. For extended storage, the solution may be frozen in working aliquots. Repeated freezing and thawing is **not** recommended. Storage in "frost-free" freezers is **not** recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use.

\*Due to the sodium azide content a material safety data sheet (MSDS) for this product has been sent to the attention of the safety officer of your institution. Consult the MSDS for information regarding hazards and safe handling practices.