



FabGennix Inc.
INTERNATIONAL

New Item New Item

Customer Service: 1-800 786 1236
Technical Service: 214 387 8105
Fax: 214 387 0870
Info@fabgennix.com
www.fabgennix.com

Calcium binding Protein "Calretinin" Antibodies

Calretinin antibodies (Cal-100P and Cal-101AP)

Calretinin is a 29 kDa calcium binding protein that is expressed in central and peripheral nervous system and in many normal and pathological tissues (1). Calretinin is also considered an important diagnostic aid in the differential diagnosis of cystic and solid ameloblastic tumors. The rat and human calretinin exhibit 98% sequence homology and 91% homology to many other species (2). Calretinin is generally expressed with two other calcium binding proteins Calbindin D-29 and parvalbumin in CNS and other peripheral tissues. Two calcium-binding proteins, calbindin and calretinin, have been reported to be expressed in abundance in Purkinje cells and other cell types in the cerebellum. The antibodies against calretinin also labels the mossy fibers throughout, and climbing fibers in a distinct group of folia. They also stain several cell types in the molecular layer. There is no appreciable immunostaining of calretinin in cerebellar cortex. In the rat, antibodies against calretinin stain the Lugaro cells, and some granule cells in lobe X; they also give weak staining of all the granule cells in the other lobes. Calretinin antibodies have been used to detect a number of carcinomas by clinicopathological, immunohistochemical techniques including, epithelial malignant mesotheliomas, Ovarian yolk sac tumor, Adenomatoid tumors of the uterus etc.

The calretinin-selective antibodies were generated against common sequences near the N-terminal end that is unique to Calretinin proteins. The polyclonal antibody labels 29 kDa calretinin in human tissues and a number of different animal species including rat and mouse. *FabGennix Inc.* provides Western blot positive controls for the calretinin in ready-to-use buffer for application on SDS-PAGE. The Calretinin antibodies were (Cal-100P/101AP) were generated using cyclic peptide methodology that results in higher titer and specificity (3). Antibody Cal-100P and Cal-101AP label Calretinin in rat brain homogenates. Calretinin-selective antibody is also available in affinity purified form for confocal, Western blotting and immunocytochemical analyses. *FabGennix Inc.* will also conjugate antibodies with fluorescent probes upon request at extra charge.

Catalog #	Host Species	Nature	Cross reactivity	Quantity	price
Cal-100P	Rabbit	Polyclonal antisera	R, M, H, *C, *monk	100 µl	195
Cal-101AP	Rabbit	Affinity purified IgG	R, M, H, *C, *monk	100 µg	225
PC-Cal	N/A	WB Positive control	N/A	5 appl	145
P-Cal-1	Peptide	Antigenic peptide		0.5 mg	65

R = rat; M = mouse; H = human; C = chicken; monk = monkey ; * not all variants are labeled equally

Immunogen:

Synthetic cyclic peptide (common to all above species Calretinin protein)

Concentration:

Cal-100P Neat serum

Cal-101AP IgG concentration 0.65-1.25 mg/ml in 50% antibody stabilization buffer containing preservatives.

Applications:

Antibody Cal-100P and Cal-101AP is ideal for immunoprecipitation/ immunopulldown assays for rat/mouse, human and avian calretinin protein. The dilutions for this antibody is for reference only, investigators are expected to determine the optimal conditions for specific assay in his/her laboratory. WB: > 1:500; IMM & i.p pull-down assays: > 1:200

Reactivity:

This antibody detects the 29 kDa calretinin from rat brain and other tissues. It has no affinity for other calcium binding proteins including Calbindin, parvalbumin, and S100 protein.

29 kDa Calretinin →

Protocols:

Standard protocol for various applications (WB, IMM & IHC) of this antibody is provided with the product specification sheet, however, FGI Inc., strongly recommends investigators to optimize conditions for use.

Form/Storage:

The antiserum is supplied in antibody stabilization buffer with 0.02% Na3N. For long-term storage of antibodies, store at -20°C. *FabGennix Inc.* does not recommend storage of very dilute antibody solutions unless they are prepared in specially formulated multi use antibody dilution buffer (Cat # DiluOBuffer). Working solutions of antibodies in DiluOBuffer should be filtered through 0.45µ filter after every use for long-term storage.

References:

1. Strauss K I., Jacobowitz D. M. *Neurochem Int.* 22, 541-546, 1993.
2. Attems J. H., Linter F., Pseudomesotheliomatous adenocarcinoma of the lung with rhabdoid features. *Pathol. Res. Pract.* 197, 841-846, 2001.
3. Farooqui S. M. Hamdi A., Brock J., Prasad C. J. *Neurochem* 57:1363-369, 1991.

Western blot using Calretinin WB positive control (PC-Cal) with 1:500 diluted anti-calretinin antibody (Cal-101AP).

* For users who may require large amounts of Cal-100P or Cal-101AP, please enquire about bulk material discounts.

This Product is for Research Use Only and is NOT intended for use in humans or clinical diagnosis.

021202-0020SF100 k87-rev10.00

FabGennix Inc.
INTERNATIONAL

5850 Town and Country Blvd. Suite 301. Frisco, TX 75034

Customer service: 1800 786 1236; Technical Support: 214 387 8105