9853 Pacific Heights Blvd.
Suite D. San Diego,
CA 92121, USA
Tel: 858-263-4982
Email: info@abeomics.com

32-4621: Recombinant Rat Calbindin-1

Alternative Name : Calbindin,Vitamin D-dependent calcium-binding protein,avian-type,Calbindin D28,D-28K,Spot 35 protein,Calb1,CaBP28K,MGC93326.

Description

Source : Escherichia Coli. Recombinant Rat Calbindin-1 produced in E.Coli.The Rat CALB1 is purified by proprietary chromatographic techniques. Calbindins are Ca-binding proteins belonging to the troponin C superfamily. CALB28K/Calbindin1/CALB1 (D28K/Spot35 protein or cholecalcin, rat 261 aa; mouse 261 aa; human 261-aa, chromosome 8q21.3-q22.1) was originally described as 27-kDA induced by vitamin D in the duodenum of chicken. In mammals, it is expressed in the kidney, pancreatic islets, and brain. In brain, its synthesis is independent of vitamin D. CABP28K contains 4 active and 2 inactive EF-hand Ca-binding domains. The gene for CABP28K is clustered in the same region as carbonic anhydrase. The neurons in the brains of patients with Huntington disease are CAB28K depleted. There are two types of CaBPs: the 'trigger'- and the 'buffer'-CaBPs. The conformation of 'trigger' type CaBPs changes upon Ca2+ binding and exposes regions on protein that interact with target molecules, thus altering their activity. The buffer-type CABP are thought to control the intracellular calcium concentration. Calbindin D-28K is found predominantly in subpopulations of central and peripheral nervous system neurons, and in certain epithelial cells involved in Ca2+ transport such as distal tubular cells and cortical collecting tubules of the kidney, and in enteric neuroendocrine cells.

Product Info

Amount :	5 µg
Purification :	Greater than 90% as determined by SDS-PAGE.
Content :	The protein was lyophilized from a concentrated solution (1mg/ml) containing 50mM NaHCO3.
Storage condition :	Lyophilized CABP28K although stable at room temperature for 3 weeks, should be stored desiccated below -18°C. Upon reconstitution CABP28K should be stored at 4°C between 2-7 days and for future use below -18°C.For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Application Note

It is recommended to reconstitute the lyophilized CABP28K in sterile 18MÃ□Â©-cm H2O not less than 100Ã□Âµg/ml, which can then be further diluted to other aqueous solutions.

For Research Use Only. Not for use in diagnostic/therapeutics procedures.