

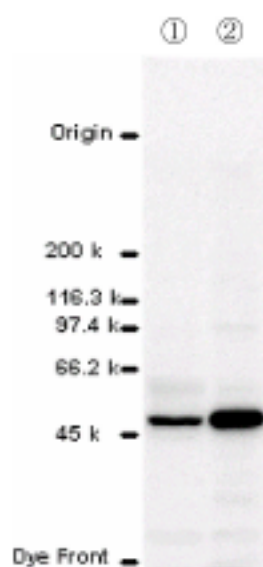
Anti Ca²⁺ /Calmodulin-Dependent Protein Kinase II δ 1- δ 4 Polyclonal Antibody

Ca²⁺/calmodulin-dependent protein kinase II (CaM kinase II) may play key roles in various Ca²⁺-induced cellular functions. Interestingly, many kinds of isoforms have been identified in various tissues or cells. Recently, it has been revealed that some isoforms are located in specific regions in the cells, so it is speculated that these isoforms have physiologically particular functions in each region.

There are four different isoforms such as α , β , γ and δ . This antibody reacts with δ 1 - δ 4 splice variants. Immunochemical studies indicate that δ 2 is expressed in various tissues or cells such as insulinoma cells and that δ 3 is abundant in the nucleus in cerebellar granule cells. These results suggest that δ 3 is involved in Ca²⁺-dependent gene expression.

This antibody has been proved to be useful for the immunoblotting and immunohistochemistry.

Package Size	200 μ g (200 μ L / vial)
Format	Rabbit polyclonal antibody 1 mg/mL
Buffer	0.1% Proclin as bacteriostat, 2% Block Ace as a stabilizer in PBS
Storage	Store below -20°C Once thawed, store at 4°C. Repeated freeze-thaw cycles should be avoided.
Purification method	This antibody was purified from rabbit serum immunized with 15-amino acid segment from unique carboxyl-terminal ends of CaM kinaseII δ 1 - δ 4 isoforms by Protein G affinity chromatography.
Working dilution	Immunohistochemistry: 15 μ g/mL ,for immunoblotting: 10~20 μ g/mL



Immunoblotting

Sample:

- ① MIN6 (control)
- ② MIN6 (after overexpression of δ 2)

Preparation of antibodies and instruction

Hideyuki Yamamoto

Department of Pharmacology and Neuropsychiatry,

Faculty of Medicine, Kumamoto University, Japan

Anti Ca²⁺ / Calmodulin-Dependent Protein Kinase II δ 1- δ 4 Polyclonal Antibody

【Reference】

1. Matumono,K., Ebihara,K., Yamamono, H., Tabuchi, H., Fukunaga, K., Yasunami, M., Ohkubo, H., Shichiri, M.,Miyamoto, E: *J.Biol.Chem.*,274,2053-2059 (1999)
2. Tabuchi, H., Yamamoto, H., Matsumoto, K., Ebihara, K., Takeuchi, Y., Fukunaga,K.,Hiraoka,H., Sakai Y., Shichiri,M., Miyamoto,E. :*Endocrinology*,141,2350-2360 (2000)
3. Takeuchi, Y., Yamamoto, H., Matsimoto, K., Kimura, T., Katsuragi, S., Miyakawa, T., Miyamoto, E.: *J.Neurochem.*,72,815-825 (1999)
4. Takeuchi, Y., Yamamoto, H., Miyakawa, T., Miyamoto, E.: *J. Neurochem.*,74,1913-1922 (2000)
5. Takeuchi, Y., Yamamoto, H., Fukunaga, K., Miyakawa, T., Miyamoto, E. : *J. Neurochem.*,74,2557-2567 (2000)

Manufacturer



7-1-14 Minatojimaminami-machi, Chuo-ku, Kobe, Japan 650-0047

Telephone: +81-78-306-0295 FAX: +81-78-306-0296

URL: <http://www.transgenic.co.jp> techstaff@transgenic.co.jp