83103 Avenue 48, Ste.1B #204 Coachella, CA 92236 USA Phone : +1.6268339877 Email : info@cali-bio.com

# Product Datasheet

Product Name Calretinin Human Recombinant

Cata No CB501022

Source Escherichia Coli.

Synonyms Calretinin, CR, CALB2, CAB29, CAL2, CaBP29K, 29 kDa calbindin.

# **Description**

Calretinin/CR/CLB2/CALB2/Calbindin D29K protein (mouse/rat/human 271aa, chromosome 16q22.1, mol wt ~29 kDa) also belongs to the Calbindin family. It is most closely related to CABP28K (~55% identity). It may be alternatively spliced to a C-terminally truncated fragment, Calretinin-22K in some tumor cell lines. Calretinin is highly expressed in the cerebellum, olfactory bulb, and in auditory neurons. Calretinin gene inactivation in mice eliminated long-term potentiation induction in the gentate gyrus and impaired motor coordination. Recombinant Human Calbindin 29kDa is expressed with a -6xHis tag and purified by proprietary chromatographic techniques.

# **Physical Appearance**

Sterile Filtered White lyophilized (freeze-dried) powder.

# **Purity**

Greater than 90% as determined by SDS-PAGE.

#### **Formulation**

The protein was lyophilized from a concentrated solution (1mg/ml) containing 10mM Tris pH-7.4, 50mM sodium chloride and 1mM b-mercaptoethanol.

## Reconstitution

It is recommended to reconstitute the lyophilized CABP29K in sterile 18M $\Omega$ -cm H2O not less than 100 $\mu$ g/ml, which can then be further diluted to other aqueous solutions.

# **Stability**

Lyophilized CABP29K although stable at room temperature for 3 weeks, should be stored desiccated below -18℃. Upon reconstitution CABP29K should be stored at 4℃ between 2-7 days and for future use below -18℃. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).

Please prevent freeze-thaw cycles.

#### **Applications**

This protein can be used for immunoblots, absorption experiments in immunohistochemistry, radioimmunoassay and intracellular injection.

For adsorption we suggest the following procedure:

- A- Dilute 1  $\mu$ I of the antiserum against calretinin in 5 ml of the usual buffer for immunohistochemistry (final dilution 1:5'000).
- B- Add 1µg of recombinant protein to 1ml of the diluted antibody solution and mix well.
- C- Incubate for at least 6 hours in the cold.
- D- Apply to tissue-sections and incubate for 3 days.
- E Complete the immunohistochemical reaction as usual (biotinylated second antibody, ABC-complex, DAB).

As a result, the immunostaining should be strongly reduced or even completely prevented.

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