## For Research Use Only

## CAMK2D Recombinant antibody

Catalog Number:81014-1-RR



**Basic Information** 

Catalog Number: GenBank Accession Number: 81014-1-RR BC032784

GeneID (NCBI): Size: 1000 ug/ml

**UNIPROT ID:** Source: Rabbit Q13557 Full Name: Isotype:

calcium/calmodulin-dependent

protein kinase II delta Immunogen Catalog Number:

AG31276 Calculated MW:

> 59 kDa Observed MW: 54-59 kDa

**Applications** 

**Tested Applications:** WB, IHC, ELISA

**Species Specificity:** human, mouse, rat, pig

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Purification Method:** 

Protein A purification CloneNo.:

1M10

Recommended Dilutions:

WB 1:5000-1:50000 IHC 1:50-1:500

Positive Controls:

WB: rat brain tissue, mouse brain tissue, pig brain

IHC: mouse brain tissue,

## **Background Information**

CaMKII delta, also named as CAMKD, belongs to the protein kinase superfamily, CAMK Ser/Thr protein kinase family and CaMK subfamily. CaM-kinase II (CAMK2) is a prominent kinase in the central nervous system that may function in long-term potentiation and neurotransmitter release, composed of four different chains: alpha, beta, gamma, and delta. The CAMK2 protein kinases contain a unique C-terminal subunit association domain responsible for oligomerization. The different chains assemble into homo-or heteromultimeric holoenzymes composed of 8 to 12 subunits. This antibody is specific to the C-term of delta chain, CaMKII delta. It may also recognize CAMK2A due to the high homology.

Storage

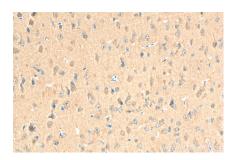
Storage:

Store at -20°C. Stable for one year after shipment.

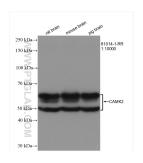
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

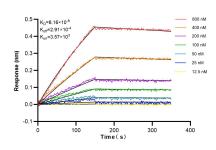
## Selected Validation Data



Immunohistochemical analysis of paraffinembedded mouse brain tissue slide using 81014-1-RR (CAMK2D antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Various lysates were subjected to SDS PAGE followed by western blot with 81014-1-RR (CAMK2D antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Biolayer interferometry (BLL) kinetic assays of 81014-1-RR against Human CAMK2D were performed. The affinity constant is 81.6 nM.