

### 36-3392: Anti-Calbindin 1 (CALB1) Monoclonal Antibody(Clone: CALB1/2782)

<b>Clonality :</b>	Monoclonal
<b>Clone Name :</b>	CALB1/2782
<b>Application :</b>	ELISA,IHC
<b>Reactivity :</b>	Human
<b>Gene :</b>	CALB1
<b>Gene ID :</b>	793
<b>Uniprot ID :</b>	P05937
<b>Alternative Name :</b>	avian-type; CAB27; CALB 1; CALB; CALB1; CALB1_HUMAN; Calbindin 1 28kDa; Calbindin; Calbindin D28; D 28K; D-28K; D28K; OTTHUMP00000166027; OTTHUMP00000225441; RTVL H protein; Vitamin D dependent calcium binding protein; Vitamin D dependent calcium binding protein avian type; Vitamin D-dependent calcium-binding protein
<b>Isotype :</b>	Mouse IgG2b, kappa
<b>Immunogen Information :</b>	Recombinant fragment (around aa 7-96) of human CALB1 protein (exact sequence is proprietary)

#### Description

The family of EF-hand type Ca<sup>2+</sup>-binding proteins includes Calbindin D28K, Calbindin D9K, S-100 (also designated oncomodulin). Calbindin D28K, also known as calbindin, CALB1, D-28K or vitamin D-dependent calcium-binding protein, is a 261-amino acid protein with 6 EF-hand domains, 4 of which are active calcium-binding domains. Expressed in brain, ovary, uterus, testis, pancreas, liver, kidney and intestine, Calbindin D28K acts as a calcium-buffering agent and alters the activity of the plasma membrane ATPase. In neuronal cells, Calbindin D28K modulates calcium channel activity, calcium transients and intrinsic neuronal firing activity. Also, Calbindin D28K has been implicated to play a role in apoptosis and microtubule function.

#### Product Info

<b>Amount :</b>	20 µg / 100 µg
<b>Content :</b>	200 µg/ml of Ab Purified from Bioreactor Concentrate by Protein A/G. Prepared in 10mM PBS with 0.05% BSA & 0.05% azide. Also available WITHOUT BSA & azide at 1.0mg/ml.
<b>Storage condition :</b>	Antibody with azide - store at 2 to 8°C. Antibody without azide - store at -20 to -80°C. Antibody is stable for 24 months. Non-hazardous.

#### Application Note

ELISA (For coating, order antibody without BSA);Immunohistochemistry (Formalin-fixed) (1-2ug/ml for 30 minutes at RT)(Staining of formalin-fixed tissues requires heating tissue sections in 10mM Tris with 1mM EDTA, pH 9.0, for 45 min at 95&degC followed by cooling at RT for 20 minutes);

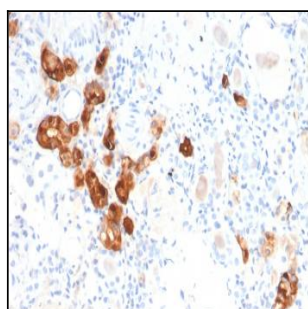


Fig. 1: Formalin-fixed, paraffin-embedded human Kidney stained with Calbindin 1 Mouse Monoclonal Antibody (CALB1/2782).

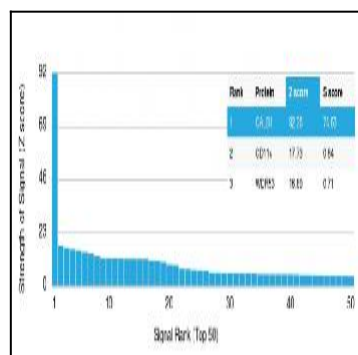


Fig. 2: Analysis of Protein Array containing more than 19,000 full-length human proteins using Calbindin Mouse Monoclonal Antibody (CALB1/2782) Z- and S- Score: The Z-score represents the strength of a signal that a monoclonal antibody (Monoclonal Antibody) (in combination with a fluorescently-tagged anti-IgG secondary antibody) produces when binding to a particular protein on the HuProt™ array. Z-scores are described in units of standard deviations (SD's) above the mean value of all signals generated on that array. If targets on HuProt™ are arranged in descending order of the Z-score, the S-score is the difference (also in units of SD's) between the Z-score. S-score therefore represents the relative target specificity of a Monoclonal Antibody to its intended target. A Monoclonal Antibody is considered to specific to its intended target, if the Monoclonal Antibody has an S-score of at least 2.5. For example, if a Monoclonal Antibody binds to protein X with a Z-score of 43 and to protein Y with a Z-score of 14, then the S-score for the binding of that Monoclonal Antibody to protein X is equal to 29.