

Rabbit Anti-Parvalbumin [EP300]: RM0389

Intended Use: For Research Use Only

Description: Parvalbumin is a 12 kDa calcium-binding protein that modulates intracellular calcium dynamics. Capable of binding two calcium ions, parvalbumin functions as a relaxing factor that shuttles calcium ions from other calcium-binding proteins to buffer intracellular calcium. First detected in glycolytic skeletal muscle fibers, it is also expressed in the axons and terminals of cerebellar interneurons of the cerebellum, horizontal and ganglion cells of the retina, and distal convoluted tubules and connecting tubules in the kidney. In cancer, parvalbumin has been suggested as a useful marker for distinguishing primary and metastatic chromophobe renal cell carcinoma and renal oncocytoma from papillary renal cell and clear cell carcinomas. It stains 80-100% of chromophobe carcinomas and 69-82% of oncocytomas, compared to 0-8% clear cell and 0-31% papillary renal cell carcinomas. Sensitivity and specificity was determined as 80% and 89%, respectively.

Specifications:

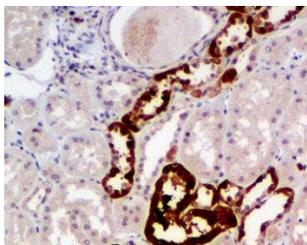
Clone: EP300
Source: Rabbit
Isotype: IgG
Reactivity: Human
Localization: Nucleus
Formulation: Antibody in PBS pH7.2, containing < 0.2% BSA and < 0.09% sodium azide (NaN₃).
Storage: Store at 2°- 8°C.
Applications: IHC
Package:

Description	Catalog No.	Size
Parvalbumin Concentrated	RM0389	1 ml

IHC Procedure*:

Positive Control Tissue: Tonsil, cerebellum
Concentrated Dilution: 50-200
Pretreatment: Citrate pH6.0 or EDTA pH8.0, 15 minutes using Pressure Cooker, or 30-60 minutes using water bath at 95°-99°C
Incubation Time and Temp: 30-60 minutes @ RT
Detection: Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.



FFPE human kidney stained with anti-Parvalbumin using DAB

References:

1. Preferential inactivation of Scn1a in parvalbumin interneurons increases seizure susceptibility. Dutton SB, et al. Neurobiol Dis. Jan;49:211-20, 2013.
2. Parvalbumin in fish skin-derived gelatin: is there a risk for fish allergic consumers? Koppelman SJ, et al. Food Addit Contam Part A Chem Anal Control Expo Risk Assess. 29(9):1347-55, 2012.
3. Identification of sole parvalbumin as a major allergen: study of cross-reactivity between parvalbumins in a Spanish fish-allergic population. Perez-Gordo M, et al. Clin Exp Allergy. May;41(5):750-8, 2011.
4. Effects of estrogen via estrogen receptors on parvalbumin levels in cardiac myocytes of ovariectomized rats. Wirakiat W, et al. Acta Histochem. Jan;114(1):46-54, 2012.

Doc. 100-RM0389
Rev. A