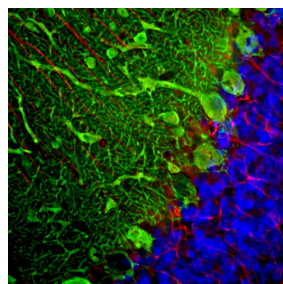
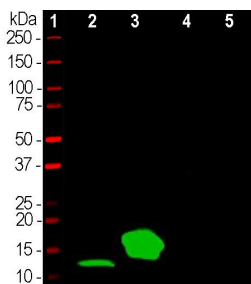


Cat. No:	AB-83912
Conjugate:	Unconjugated
Size:	100 ug
Clone:	POLY
Concentration:	1mg/ml
Host:	Chicken
Isotype:	IgY
Immunogen:	Full-length recombinant human protein expressed in and purified from E. coli.
Reactivity:	Hu Rt Ms
Applications:	Western Blot: 1:1,000-1:5,000 Immunofluorescence: 1:1,000-1:5,000 Immunohistochemistry: 1:1,000-1:5,000 Immunocytochemistry: 1:1,000-1:5,000
Molecular Weight:	12kDa
Purification:	Aff. Pur.
Background:	Parvalbumin is a low molecular weight cytoplasmic Calcium binding protein containing the "EF hand" Calcium binding motif and is the first protein characterized in this subclass. Parvalbumin is expressed in fast-contracting muscles, in the brain and in some endocrine tissues. In brain it is particularly concentrated in Purkinje cells and interneurons in the molecular layer, but is also found in many cortical GABAergic interneurons. These GABAergic interneurons in most cases express only one of three Calcium binding proteins, namely parvalbumin, calretinin or calbindin. Each type of interneuron has distinct electrophysiological properties and as a result, different types of interneuron can be identified and classified based on their content of these three proteins. The Pvalb antibody was made against full length recombinant human parvalbumin expressed in and purified from E. coli. Since parvalbumin is related in amino acid sequence to both calretinin and calbindin, we also expressed these proteins to check that our various reagents show no cross reactivity. So our antibodies to parvalbumin are useful cell type markers provided, as is the case with this antibody, they do not cross react with the related molecules calretinin or calbindin.
Form:	Liquid
Buffer:	Supplied as an aliquot of IgY preparation plus 5mM NaN3
Storage:	Store at 4°C



Western blot analysis of skeletal muscle lysates and His-tagged recombinant human proteins using chicken pAb to parvalbumin, Pvalb, dilution 1:2,000, in green: protein standard (red), mouse muscle, recombinant full length human parvalbumin, recombinant full length human calretinin and [5] recombinant full length human calbindin. Band at 12kDa in muscle lysate is native parvalbumin and 18kDa band in the next lane is His-tagged recombinant parvalbumin. The Pvalb antibody binds parvalbumin strongly but is not cross-reactive with the related calcium binding proteins calretinin and calbindin.

Immunofluorescent analysis of a rat cerebellum section stained with chicken pAb to parvalbumin, Pvalb, dilution 1:2,000, in green, and costained with mouse mAb to GFAP, dilution 1:500, in red. The blue is DAPI staining of nuclear DNA. Following transcardial perfusion of rat with 4% paraformaldehyde, brain was post fixed for 24 hours, cut to 45 μ m, and free floating sections were stained with above antibodies. The Pvalb antibody labels the perikarya and dendrites of Purkinje cells and interneurons in the molecular layer of the cerebellum. The GFAP antibody stains the processes of Bergmann glia and astrocytes.

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