
Product Data Sheet

Product Name: PVALB Rat
Cat. No.: GP24441
Batch No.: 1

Product Data

Purity	>98%	Source	Escherichia Coli.
Physical Appearance	solid	Shipping Condition	Shipped at Room temp.
Synonyms	Pvalb; Pva; PALB1; Parvalbumin.		
Solubility	It is recommended to reconstitute the lyophilized Parvalbumin in sterile 18MΩ-cm H ₂ O not less than 100μg/ml, which can then be further diluted to other aqueous solutions.		
Formulation	The protein was lyophilized from a concentrated solution (1mg/ml) without any additives.		

Introduction

Parvalbumin is calcium binding albumin protein, which binds two calcium ions. Parvalbumin has 3 EF hand motifs and is structurally related to calmodulin and troponin C. Pvalb is localized in fast-contracting muscles, where its levels are highest, in the brain and some endocrine tissues. Parvalbumin is found in GABAergic interneurons in the nervous system, primarily expressed by chandelier and basket cells in the cortex. Parvalbumin interneurons' connections are generally perisomatic (surrounding the cell body of neurons). In the hippocampus, PV+ interneurons are subdivided into basket, axo-axonic, bistratified, and oriens-lacunosum moleculare (O-LM) cells, each subtype targeting distinct domains of pyramidal cells. The majority of the Parvalbumin interneurons are fast-spiking, and are thought to generate gamma waves recorded in EEG. Pvalb -expressing interneurons represent roughly 25% of GABA cells in the primate DLPCF. Decreased Parvalbumin and GAD67 expression was found in PV+ GABAergic interneurons in schizophrenia. Parvalbumin is identified as an allergen causing seafood allergy. Pvalb may have evolved from an ancestral four domain calcium binding protein.

Stability

Lyophilized Parvalbumin although stable at room temperature for 3 weeks, should be

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stored desiccated below -18°C . Upon reconstitution Parvalbumin should be stored at 4°C between 2-7 days and for future use below -18°C .For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA).Please prevent freeze-thaw cycles.

Background

Recombinant Rat Parvalbumin produced in E.Coli.The Rat Parvalbumin is purified by proprietary chromatographic techniques.

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