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Arc1 Rabbit pAb

Catalog Number: bs-10793R

Target Protein: Arc1
Concentration: 1mg/ml

Form: Liquid
Host: Rabbit
Clonality: Polyclonal

Isotype: IgG

Applications: IHC-P (1:100-500), IHC-F (1:100-500), IF (1:100-500), ICC/IF (1:100-500), ELISA (1:5000-10000)

Reactivity: (predicted:Fruit Fly)

Predicted MW: 29 kDa

Source: KLH conjugated synthetic peptide derived from Fruit Fly Arc1: 121-320/254.

Purification: affinity purified by Protein A

Storage: Preservative: 0.02% Proclin300, Constituents: 1% BSA, 0.01M PBS, pH7.4.

Shipped at 4°C. Store at -20°C for one year. Avoid repeated freeze/thaw cycles.

Background: Arc, for activity-regulated cytoskeleton-associated protein (also known as Arg3.1), is a

plasticity protein first characterized in 1995. Arc is a member of the immediate-early gene (IEG) family, a rapidly activated class of genes functionally defined by their ability to be transcribed in the presence of protein synthesis inhibitors. Arc mRNA is localized to activated synaptic sites in an NMDA receptor-dependent manner, where the newly translated protein is believed to play a critical role in learning and memory-related molecular processes. Arc is widely considered to be an important protein in neurobiology because of its activity regulation, localization, and utility as a marker for plastic changes in the brain. Dysfunctions in the production of Arc protein has been implicated as an important factor in understanding of various neurological conditions including: Amnesia; Alzheimer's disease; Autism spectrum disorders; and, Fragile X syndrome. Along with other IEGs such as zif268 and Homer 1a, Arc is also a significant tool for systems neuroscience as illustrated by the development of the cellular compartment analysis of temporal activity by fluorescence in situ hybridization, or catFISH technique (see fluorescent in situ hybridization).