

Anti-Human SHANK2 Polyclonal Antibody

Polyclonal Antibody

Cat.NO.: PA05842

3th Edition

Description: This gene encodes a protein that is a member of the Shank family of synaptic proteins that may function as molecular scaffolds in the postsynaptic density of excitatory synapses. Shank proteins contain multiple domains for protein-protein interaction, including ankyrin repeats, and an SH3 domain. This particular family member contains a PDZ domain, a consensus sequence for cortactin SH3 domain-binding peptides and a sterile alpha motif. The alternative splicing demonstrated in Shank genes has been suggested as a mechanism for regulating the molecular structure of Shank and the spectrum of Shank-interacting proteins in the postsynaptic densities of the adult and developing brain. Alterations in the encoded protein may be associated with susceptibility to autism spectrum disorder. Alternative splicing results in multiple transcript variants. SHANK2 (SH3 And Multiple Ankyrin Repeat Domains 2) is a Protein Coding gene. Diseases associated with SHANK2 include Autism Susceptibility 17 and Autism Spectrum Disorder. Among its related pathways are Protein-protein interactions at synapses and Neuroscience. GO annotations related to this gene include SH3 domain binding and GKAP/Homer scaffold activity. An important paralog of this gene is SHANK3.

Antigen: Synthesized peptide derived from the Internal region of human Shank 2

Form:

How to use: 1.0 ml distilled water will be added to the product

Stability: Lyophilized product, 5 years at 2 – 8°C; Solution, 2 years at –20°C

Dilution: PBS (pH7.4) containing 1% BSA

Application: This antibody can be used for western blotting in concentration of 1?5?g/ml.

Specificity: Expressed in epithelial cells (at protein level). All isoforms except isoform 7 are expressed predominantly in brain, with highest levels in olfactory bulb, cerebral cortex, cerebellum, central gray matter and hippocampus. Moderate levels of expression are seen in the caudate putamen, thalamic nuclei and brain stem. In cerebellum primarily expressed in Purkinje cells. Isoform 7 is not expressed in brain but expressed in liver, cholangiocytes and thymus. Isoform 7 is present in pancreas, colonic mucosa and thymocytes (at protein level).