Immunotag™ SYGP1 Polyclonal Antibody

Antibody Specification

Catalog No.	ITN2048
Product Description	Immunotag™ SYGP1 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	SYGP1
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Reactive Species	Human,Rat,Mouse
Host Species	Rabbit
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	SYGP1 Polyclonal Antibody detects endogenous levels of protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Gene Name	SYNGAP1 KIAA1938
Accession No.	Q96PV0 F6SEU4 Q9QUH6
Description	synaptic Ras GTPase activating protein 1(SYNGAP1) Homo sapiens The protein encoded by this gene is a major component of the postsynaptic density (PSD), a group of proteins found associated with NMDA receptors at synapses. The encoded protein is phosphorylated by calmodulin-dependent protein kinase II and dephosphorylated by NMDA receptor activation. Defects in this gene are a cause of mental retardation autosomal dominant type 5 (MRD5). [provided by RefSeq, Dec 2009],

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Protein Expression	Amygdala,Brain,
Subcellular Localization	cytoplasm,cytosol,postsynaptic density,intrinsic component of the cytoplasmic side of the plasma membrane,dendritic shaft,
Protein Function	Additional isoforms seem to exist,caution:It is uncertain whether Met-1 or Met-16 is the initiator methionine.,disease:Defects in SYNGAP1 are the cause of mental retardation autosomal dominant type 5 (MRD5) [MIM:612621]. Mental retardation is characterized by significantly sub-average general intellectual functioning associated with impairments in adaptative behavior and manifested during the developmental period. MRD5 patients show global developmental delay with delayed motor development, hypotonia, moderate-to-severe mental retardation, and severe language impairment.,function:Major constituent of the PSD essential for postsynaptic signaling. Inhibitory regulator of the Ras-cAMP pathway. Member of the NMDAR signaling complex in excitatory synapses, it may play a role in NMDAR-dependent control of AMPAR potentiation, AMPAR membrane trafficking and synaptic plasticity. Regulates AMPAR-mediated miniature excitatory postsynaptic currents. May be involved in certain forms of brain injury, leading to long-term learning and memory deficits.,PTM:Phosphorylated by CaM-kinase II. Dephosphorylated upon NMDA receptor activation or SYNGAP1/MPDZ complex disruption.,similarity:Contains 1 C2 domain.,similarity:Contains 1 PH domain.,similarity:Contains 1 Ras-GAP domain.,subunit:Interacts CAMK2A and CAMK2B (By similarity). Interacts with MPDZ.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.