## **GKAP Conjugated Antibody**

Catalog No: #C48463

SAB Signalway Antibody

Package Size: #C48463-AF350 100ul #C48463-AF405 100ul #C48463-AF488 100ul

#C48463-AF555 100ul #C48463-AF594 100ul #C48463-AF647 100ul

#C48463-AF680 100ul #C48463-AF750 100ul #C48463-Biotin 100ul

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

Product Name	GKAP Conjugated Antibody
Host Species	Mouse
Clonality	Monoclonal
Species Reactivity	Hu
Immunogen Description	Recombinant protein
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	cGMP dependent protein kinase anchoring protein 42kDa antibody cGMP dependent protein kinase anchoring protein of 42 kDa antibody cGMP-dependent protein kinase-anchoring protein of 42 kDa antibody  FKSG21 antibody G kinase anchoring protein 1 antibody G kinase-anchoring protein 1 antibody gkap1 antibody GKAP1_HUMAN antibody GKAP42 antibody  Protein kinase anchoring protein GKAP42 antibody
Accession No.	Swiss-Prot#:O14490
Uniprot	O14490
GeneID	9229;
Excitation Emission	AF350: 346nm/442nm AF405: 401nm/421nm AF488: 493nm/519nm AF555: 555nm/565nm AF594: 591nm/614nm AF647: 651nm/667nm AF680: 679nm/702nm AF750: 749nm/775nm
Calculated MW	109 kDa
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## **Application Details**

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250
AF405 conjugated: most applications: 1: 50 - 1: 250
AF488 conjugated: most applications: 1: 50 - 1: 250
AF555 conjugated: most applications: 1: 50 - 1: 250
AF594 conjugated: most applications: 1: 50 - 1: 250
AF647 conjugated: most applications: 1: 50 - 1: 250

AF680 conjugated: most applications: 1: 50 - 1: 250
AF750 conjugated: most applications: 1: 50 - 1: 250

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## Background

The neurotransmitter glutamate facilitates neuronal signalling at excitatory synapses. Glutamate is released from the presynaptic membrane into the synaptic cleft. Across the synaptic cleft glutamate binds to both ion channels and metabotropic glutamate receptors at the postsynapse, which expedite downstream signalling in the neuron. The postsynaptic density, a highly specialized matrix, which is attached to the postsynaptic membrane, controls this downstream signalling. The postsynaptic density also resets the synapse after each synaptic firing. It is composed of numerous proteins including a family of Discs large associated protein 1, 2, 3 and 4 (DLGAP1-4) that act as scaffold proteins in the postsynaptic density. They link the glutamate receptors in the postsynaptic membrane to other glutamate receptors, to signalling proteins and to components of the cytoskeleton. With the central localisation in the postsynapse, the DLGAP family seems to play a vital role in synaptic scaling by regulating the turnover of both ionotropic and metabotropic glutamate receptors in response to synaptic activity. DLGAP family has been directly linked to a variety of psychological and neurological disorders. In this review we focus on the direct and indirect role of DLGAP family on schizophrenia as well as other brain diseases.

Note: This product is for in vitro research use only