

SAG Protein, Human (P.pastoris, His)

Cat. No.:	HY-P71781
Synonyms:	48kDa protein; Arrestin 1; Arrestin; ARRS_HUMAN; S antigen; S arrestin; S-AG; S-arrestin; SAG
Species:	Human
Source:	P. pastoris
Accession:	P10523 (M1-E405)
Gene ID:	6295
Molecular Weight:	Approximately 47.1 kDa

PROPERTIES

AA Sequence

MAASGKTSKS	EPNHVIFKKI	SRDKSVTIYL	GNRDYIDHVS
QVQPVVDGVL	VDPDLVKGKK	VYVTLTCAFR	YGQEDIDVIG
LTFRRDLYFS	RVQVYPPVGA	ASTPTKLQES	LLKKLGSNTY
PFLLTFFPDYL	PCSVMLQPAP	QDSGKSCGVD	FEVKAFATDS
TDAEEDKIPK	KSSVRLLRK	VQHAPLEMGP	QPRAEAAWQF
FMSDKPLHLA	VSLNKEIYFH	GEPVPVTV	TNNTKTVKK
IKAFVEQVAN	VVLYSSDYV	KPVAMEEAQE	KVPPNSTLTK
TLTLLPLLAN	NRERRGIALD	GKIKHEDTNL	ASSTIIKEGI
DRTVLGLVLS	YQIKVKLTVS	GFLGELTSSE	VATEVPFRLM
HPQPEDPAKE	SYQDANLVFE	EFARHNLKDA	GEAEEGKRDK
NDVDE			

Appearance Lyophilized powder.

Formulation Lyophilized after extensive dialysis against solution in 20 mM Tris-HCl, 0.5 M NaCl, 6% Trehalose, pH 8.0.

Endotoxin Level <1 EU/μg, determined by LAL method.

Reconstitution It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH₂O.

Storage & Stability Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.

Shipping Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background

The SAG protein exhibits a crucial regulatory role in phototransduction by binding to photoactivated and phosphorylated rhodopsin (RHO), thereby terminating RHO signaling via G-proteins. Through competitive interaction with G-proteins for the

same binding site on RHO, SAG effectively modulates signal transduction in a manner consistent with similar proteins. Moreover, SAG may contribute to preventing light-dependent degeneration of retinal photoreceptor cells, as suggested by research findings. Structurally, SAG can exist as a monomer, homodimer, or homotetramer, highlighting its versatile oligomeric states. Furthermore, SAG engages in specific interactions with RHO, specifically binding to the phosphorylated C-terminus, elucidating its intricate involvement in the molecular dynamics of photoreceptor cells.

Caution: Product has not been fully validated for medical applications. For research use only.

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA