OriGene Technologies, Inc.
9620 Medical Center Drive, Ste 200
Rockville, MD 20850, US
Phone: +1-888-267-4436
https://www.origene.com
techsupport@origene.com
EU: info-de@origene.com
CN: techsupport@origene.cn

Product datasheet for AP54905SU-N

SIAH1 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	ELISA, IHC, WB
Recommended Dilution:	**ELISA.** **Western Blot:** 1/500-1/2000. **Immunohistochemistry:** 1/100-1/500.
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide derived from N-terminal region of SIAH-1
Specificity:	Reacts with Human 30 kDa Siah-1. Cross reacts with all species due to sequence homology.
Formulation:	State: Serum State: Lyophilized powder Preservative: None
Reconstitution Method:	Restore in distilled water.
Conjugation:	Unconjugated
Storage:	Store lyophilized at 2-8°C for 6 months or at -20°C long term. After reconstitution store the antibody undiluted at 2-8°C for one month or (in aliquots) at -20°C long term. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
Gene Name:	siah E3 ubiquitin protein ligase 1
Database Link:	Entrez Gene 6477 Human Q8IUQ4

View online »

Background: Seven in absentia homolog 1 (SIAH-1) is a member of the RING-finger-containing E3 ubiquitin ligases. Alpha-synuclein and synphilin-1 are substrates of SIAH-1. Both proteins are involved in the development of Parkinson's disease (PD). Mutations in Parkin, another E3 ubiquitin ligase which ubiquinates synphilin-1 and glycosylated alpha-synuclein, have been defined as a major cause of autosomal recessive PD. The role of SIAH-1 in PD is highlighted by the fact that SIAH-1 is a component of the Lewy bodies and plays a role in apoptosis caused by nitric oxide (NO) induced oxidative stress.Glyceraldehyde-3-phosphate dehydrogenase (GAPDH) a classic glycolytic enzyme, and multi-functional protein. GAPDH plays role as a mediator for cell death. GAPDH translocates to the nucleus under a variety of stressors/conditions, most of which are associated with oxidative stress. Sequential steps lead to nuclear translocation of GAPDH during cell death; 1] a catalytic cysteine in GAPDH (C150 in rat GAPDH) is S-nitrosylated by nitric oxide (NO) which is generated from inducible nitric oxide synthase (iNOS) and/or neuronal NOS (nNOS); 2] the modified GAPDH becomes capable of binding with Siah1, an E3 ubiquitin ligase, and stabilizes it;3] the GAPDH-Siah protein complex translocates to the nucleus, dependent on Siah1's nuclear localization signal, and degrades Siah1's substrates in the nucleus, which results in cytotoxicity.

Synonyms: Siah-1, Siah-1a, HUMSIAH