

ARG40298 anti-Glycogen Synthase 1 phospho (Ser641) antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Glycogen Synthase 1 phospho (Ser641)
Tested Reactivity	Hu, Ms
Tested Application	ICC/IF, IHC-P, IP, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Glycogen Synthase 1
Species	Human
Immunogen	Phosphospecific peptide around Ser641 of Human Glycogen Synthase 1.
Conjugation	Un-conjugated
Alternate Names	GSY; GYS; EC 2.4.1.11; Glycogen [starch] synthase, muscle

Application Instructions

Application table	Application	Dilution
	ICC/IF	1:50 - 1:200
	IHC-P	1:50 - 1:200
	IP	1:50
	WB	1:1000 - 1:2000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa	
Observed Size	~ 88 kDa	

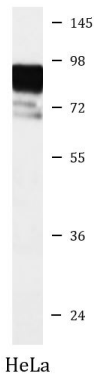
Properties

Form	Liquid
Purification	Affinity purified.
Buffer	PBS (pH 7.4), 0.02% Sodium azide and 50% Glycerol.
Preservative	0.02% Sodium azide
Stabilizer	50% Glycerol
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

Gene Symbol	GYS1
Gene Full Name	glycogen synthase 1 (muscle)
Background	The protein encoded by this gene catalyzes the addition of glucose monomers to the growing glycogen molecule through the formation of alpha-1,4-glycoside linkages. Mutations in this gene are associated with muscle glycogen storage disease. Alternatively spliced transcript variants encoding different isoforms have been found for this gene.[provided by RefSeq, Sep 2009]
Function	Transfers the glycosyl residue from UDP-Glc to the non-reducing end of alpha-1,4-glucan. [UniProt]
Calculated Mw	84 kDa
PTM	Phosphorylation at Ser-8 by AMPK inactivates the enzyme activity. Primed phosphorylation at Ser-657 (site 5) by CSNK2A1 and CSNK2A2 is required for inhibitory phosphorylation at Ser-641 (site 3a), Ser-645 (site 3b), Ser-649 (site 3c) and Ser-653 (site 4) by GSK3A and GSK3B (By similarity). Phosphorylated at Ser-641 by DYRK2, leading to inactivation (By similarity). Phosphorylated at Ser-641 by PASK, leading to inactivation; phosphorylation by PASK is inhibited by glycogen. Dephosphorylation at Ser-641 and Ser-645 by PP1 activates the enzyme. [UniProt]

Images



ARG40298 anti-Glycogen Synthase 1 phospho (Ser641) antibody WB image

Western blot: HeLa cell lysate stained with ARG40298 anti-Glycogen Synthase 1 phospho (Ser641) antibody.