abcam

Product datasheet

Anti-Glycogen synthase 1 (phospho S640) antibody ab2479

4 References　画像数 2

製品の概要

製品名	Anti-Glycogen synthase 1 (phospho S640) antibody
製品の詳細	Rabbit polyclonal to Glycogen synthase 1 (phospho S640)
特異性	This phospho specific polyclonal antibody is specific for phosphorylated Ser 640 of human muscle glycogen synthase (GYS1). Reactivity with non-phosphorylated human muscle glycogen synthase is less than 1% by ELISA.
アプリケーション	**適用あり:** IHC-P, WB
種交差性	**交差種:** Mouse, Rat, Human
免疫原	Human Muscle Glycogen Synthase (GYS1) phospho peptide corresponding to a region of the human protein conjugated to Keyhole Limpet Hemocyanin (KLH) - AQGYRYPRPA(pS)VP (aa 631-642). Run BLAST with　Run BLAST with
特記事項	Human muscle glycogen synthase (GYS1) is responsible for the biosynthesis of glycogen from phosphorylated glucose units. Mammalian liver and muscle contain GS consisting of four subunits with a total molecular weight of 360,000. GS is subject to regulation through both allosteric and covalent modification and occurs in two forms: the phosphorylated inactive form, and the dephosphorylated active form. GYS1 is inactivated by the serine/threonine kinase called glycogen synthase kinase-3b that mainly functions to phosphorylate muscle glycogen synthase. This antibody is specific for the phosphorylated form of GYS1 at Ser 640. Phosphorylation of GYS1 at S640 has been associated with Antiphospholipid Antibody Syndrome.

製品の特性

製品の状態	Liquid
保存方法	Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.
バッファー	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, 0.01% Sodium Azide, pH 7.2
精製度	Immunogen affinity purified
特記事項(精製)	This antibody was affinity purified from monospecific antiserum by immunoaffinity purification. Antiserum was first purified against the phosphorylated form of the immunizing peptide. The resultant affinity purified antibody was then cross-adsorbed against the non-phosphorylated form of the immunizing peptide.

一次抗体 備考	Human muscle glycogen synthase (GYS1) is responsible for the biosynthesis of glycogen from phosphorylated glucose units. Mammalian liver and muscle contain GS consisting of four subunits with a total molecular weight of 360,000. GS is subject to regulation through both allosteric and covalent modification and occurs in two forms: the phosphorylated inactive form, and the dephosphorylated active form. GYS1 is inactivated by the serine/threonine kinase called glycogen synthase kinase-3b that mainly functions to phosphorylate muscle glycogen synthase. This antibody is specific for the phosphorylated form of GYS1 at Ser 640. Phosphorylation of GYS1 at S640 has been associated with Antiphospholipid Antibody Syndrome.
ポリ/モノ	ポリクローナル
アイソタイプ	IgG

アプリケーション

Our Abpromise guarantee covers the use of **ab2479** in the following tested applications.

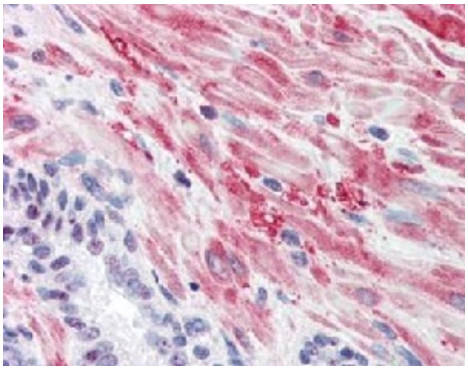
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

アプリケーション	Abreviews	特記事項
IHC-P		1/1000 - 1/5000. Perform heat mediated antigen retrieval before commencing with IHC staining protocol.
WB		1/1000. Although not tested, this antibody is likely functional in Immunohistochemistry and Immunoprecipitation.

ターゲット情報

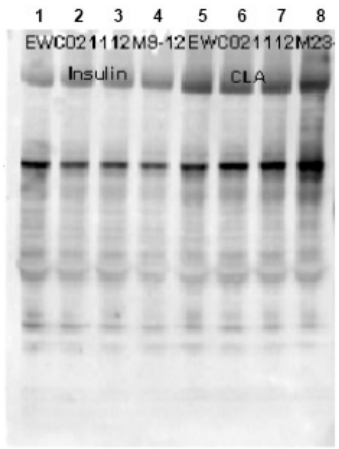
機能	Transfers the glycosyl residue from UDP-Glc to the non-reducing end of alpha-1,4-glucan.
パスウェイ	Glycan biosynthesis; glycogen biosynthesis.
関連疾患	Defects in GYS1 are the cause of muscle glycogen storage disease type 0 (GSD0b) [MIM:611556]; also known as muscle glycogen synthase deficiency. GSD0b is a metabolic disorder characterized by fasting hypoglycemia presenting in infancy or early childhood. The role of muscle glycogen is to provide critical energy during bursts of activity and sustained muscle work.
配列類似性	Belongs to the glycosyltransferase 3 family.

画像



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Glycogen synthase 1 (phospho S640) antibody (ab2479)

Immunohistochemistry with Anti-Glycogen Synthase antibody Tissue: Human Prostate Fixation: formalin-fixed, paraffin-embedded tissue Antigen retrieval: heat-induced Primary antibody(ab2479): 5 µg/ml Staining: antibody as precipitated red signal with a hematoxylin purple nuclear counterstain.



Western blot - Glycogen synthase 1 (phospho S640) antibody (ab2479)

All lanes : Anti-Glycogen synthase 1 (phospho S640) antibody (ab2479) at 1/1000 dilution

Lane 1 : mock treated mouse cardiac myocyte lysate at 12 µl
Lane 2 : insulin (10 nM, 15min) treated mouse cardiac myocyte lysate at 12 µl
Lane 3 : insulin (100 nM, 15min) treated mouse cardiac myocyte lysate at 12 µl
Lane 4 : insulin (1 mM, 15min) treated mouse cardiac myocyte lysate at 12 µl
Lane 5 : mock treated mouse cardiac myocyte lysate at 12 µl
Lane 6 : CLA treated (4 nM, 45min) mouse cardiac myocyte lysate at 12 µl
Lane 7 : CLA treated (20 nM, 45min) mouse cardiac myocyte lysate
Lane 8 : CLA treated (100 nM, 45min) mouse cardiac myocyte lysate

Secondary
Goat Anti-Rabbit IgG H&L (HRP) preadsorbed (ab7090) at 1/5000 dilution

Rabbit polyclonal to phospho Glycogen Synthase (Ser 640) used at a 1/1000 dilution to detect human muscle GS by Western blot. Approximately 12 ul of a mouse cardiac myocyte lysate was loaded per lane on a 4-20% Criterion gel for SDS-PAGE. Samples were either mock treated (lanes 1 and 5) or insulin treated at 10 nM, 100 nM and 1 mM (lanes 2, 3 and 4 respectively) for 15' or CLA treated at 4nM, 20 nM or 100 nM (lanes 6,7 and 8 respectively) for 45'.

Goat polyclonal to rabbit IgG (HRP) (ab7090) was used as secondary antibody at 1/5000.

A 4-20% Criterion gel for SDS-PAGE was used.

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