

产品名称: SERCA1 Rabbit Polyclonal Antibody
产品货号: AP Rab17747



产品概述 (Summary)

产品名称 (Production Name)	SERCA1 Rabbit Polyclonal Antibody
描述 (Description)	Rabbit polyclonal Antibody
宿主 (Host)	Rabbit
应用 (Application)	WB,IHC,ICC/IF,ELISA
种属反应性 (Reactivity)	Human,Mouse,Rat,Salamander,Other

产品性能 (Performance)

偶联物 (Conjugation)	Unconjugated
修饰 (Modification)	Unmodified
同种型 (Isotype)	IgG
克隆 (Clonality)	Polyclonal
形式 (Form)	Liquid
存放说明 (Storage)	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
储存溶液 (Buffer)	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
纯化方式 (Purification)	Affinity purification

免疫原信息 (Immunogen)

基因名 (Gene Name)	ATP2A1 ATP2A1; Sarcoplasmic/endoplasmic reticulum calcium ATPase 1; SERCA1; SR
别名 (Alternative Names)	Ca(2+)-ATPase 1; Calcium pump 1; Calcium-transporting ATPase sarcoplasmic reticulum type; fast twitch skeletal muscle isoform; Endoplasmic reticulum class 1/2 Ca(2+) AT
基因 ID (Gene ID)	487.0
蛋白 ID (SwissProt ID)	O14983.The antiserum was produced against synthesized peptide derived from human ATP2A1. AA range:548-597

产品应用 (Application)

稀释比 (Dilution Ratio)	WB 1:500-1:2000,IHC 1:100-1:300,ICC/IF 1:50-1:200,ELISA 1:5000-1:20000
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蛋白分子量 (Molecular Weight) 100kDa

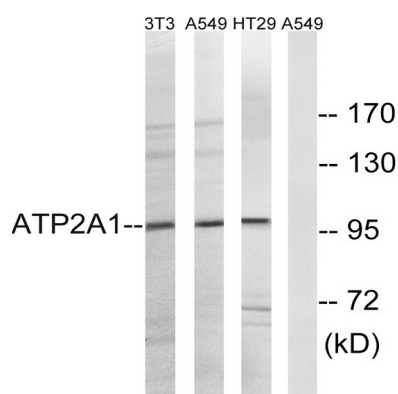
研究背景 (Background)

This gene encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. This enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen, and is involved in muscular excitation and contraction. Mutations in this gene cause some autosomal recessive forms of Brody disease, characterized by increasing impairment of muscular relaxation during exercise. Alternative splicing results in three transcript variants encoding different isoforms. [provided by RefSeq, Oct 2013],catalytic activity:ATP + H(2)O + Ca(2+)(Cis) = ADP + phosphate + Ca(2+)(Trans),developmental stage:Isoform SERCA1A accounts for more than 99% of SERCA1 isoforms expressed in adult, while isoform SERCA1B predominates in neo-natal fibers.,disease:Defects in ATP2A1 are the cause of Brody disease (BD) [MIM:601003]. BD is an autosomal recessive myopathy characterized by increasing impairment of relaxation of fast twist skeletal muscle during exercise.,enzyme regulation:Reversibly inhibited by phospholamban (PLN) at low calcium concentrations. Dephosphorylated PLN decreases the apparent affinity of the ATPase for calcium. This inhibition is regulated by the phosphorylation of PLN.,function:This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen. Contributes to calcium sequestration involved in muscular excitation/contraction.,induction:Increased contractile activity leads to decrease SERCA1 expression, while decreased contractile activity leads to increase of SERCA1 expression.,similarity:Belongs to the cation transport ATPase (P-type) family.,similarity:Belongs to the cation transport ATPase (P-type) family. Type IIA subfamily.,subunit:Associated with sarcolipin (SLN) and phospholamban (PLN),tissue specificity:Skeletal muscle, fast twitch muscle (type II) fibers.,

研究领域 (Research Area)

Calcium;Alzheimer's disease;

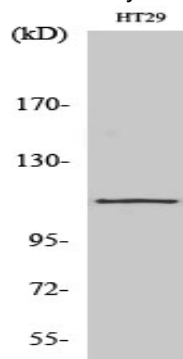
图片 (Image Data)



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blocked with the synthesized peptide.



Western Blot analysis of various cells using SERCA1 Polyclonal Antibody diluted at 1: 2000

注意事项 (Note)

For research use only .