

Basic Information

Product Name	Anti-SERCA2/ATP2A2 Antibody	
Gene Name	ATP2A2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human, mouse, rat	
Tested Application	IHC, WB	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	A synthetic peptide corresponding to a sequence in the middle region of human SERCA2 ATPase, identical to the related rat and mouse sequences.	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	115 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

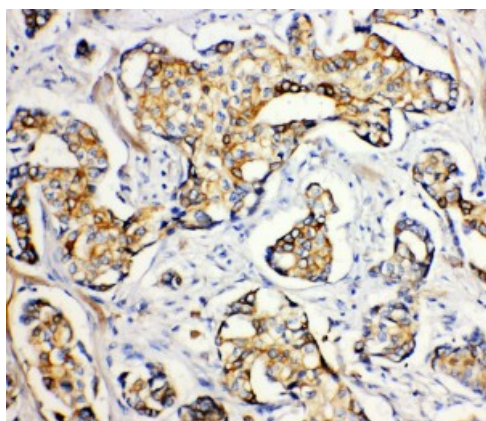
Storage

12 months from date of receipt, -20°C as supplied. 6 months 2 to 8°C after reconstitution. Avoid repeated freezing and thawing.

Background Information

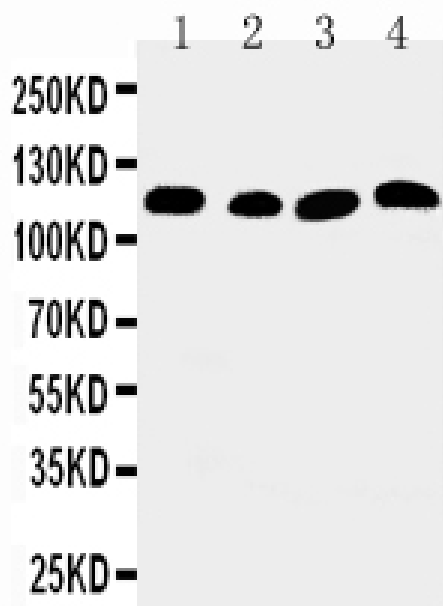
SERCA2(SARCOPLASMIC RETICULUM Ca(2+)-ATPase 2), also called ATP2A2, ATP2B, encodes one of the SERCA Ca(2+)-ATPases, which are intracellular pumps located in the sarcoplasmic or endoplasmic reticula of muscle cells. They are closely related to the plasma membrane Ca(2+)-ATPases, or PMCA. SERCA2 belongs to the large family of P-type cation pumps that couple ATP hydrolysis with cation transport across membranes. The SERCA2 gene is mapped on 12q24.11. SERCA2 was expressed in all specimens, with pronounced expression in the subnuclear aspect of basal epidermal keratinocytes. There was variable suprabasal expression. SERCA2 expression was also observed in the infundibulum and outer root sheath of hair follicles; germinative and mature cells of sebaceous glands; secretory coil and duct of eccrine glands; apocrine gland cells; and arrector pili muscle. In Darier disease skin, strong SERCA2 positivity was detected in the basal, suprabasal, and acantholytic lesional cells. Perilesional Darier disease skin was comparable to normal skin.

Selected Validation Data



IHC analysis of SERCA2/ATP2A2 using anti-SERCA2/ATP2A2 antibody (BA1744).

SERCA2/ATP2A2 was detected in a paraffin-embedded section of human mammary cancer tissue. The tissue section was incubated with rabbit anti-SERCA2/ATP2A2 Antibody (BA1744) at a dilution of 1:200 and developed using HRP Conjugated Rabbit IgG Super Vision Assay Kit (Catalog # SV0002) with DAB (Catalog # AR1027) as the chromogen.



Western blot analysis of SERCA2/ATP2A2 using anti-SERCA2/ATP2A2 antibody (BA1744). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

Lane 1: Rat Skeletal Muscle tissue lysates,

Lane 2: Rat Kidney tissue lysates,

Lane 3: PANC whole cell lysates,

Lane 4: SMMC whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-SERCA2/ATP2A2 antigen affinity purified polyclonal antibody (BA1744) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for SERCA2/ATP2A2 at approximately 115 kDa. The expected band size for SERCA2/ATP2A2 is at 115 kDa.