

## Product datasheet for **TA383783S**

### **SERCA2 (ATP2A2) Rabbit Monoclonal Antibody [Clone ID: R09-1G2]**

#### **Product data:**

Product Type:	Primary Antibodies
Clone Name:	R09-1G2
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1/2000-1/10000 IHC: 1/20 ICC/IF: 1/50-1/100
Reactivity:	Human, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Monoclonal
Immunogen:	A synthetic peptide of human SERCA2 ATPase
Formulation:	50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% Sodium azide and 0.05% BSA
Concentration:	lot specific
Purification:	Affinity Purified
Conjugation:	Unconjugated
Storage:	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles.
Stability:	1 year
Predicted Protein Size:	Calculated MW: 115 kDa; Observed MW: 115 kDa
Gene Name:	ATPase sarcoplasmic/endoplasmic reticulum Ca <sup>2+</sup> transporting 2
Database Link:	<a href="#">Entrez Gene 488 Human P16615</a>



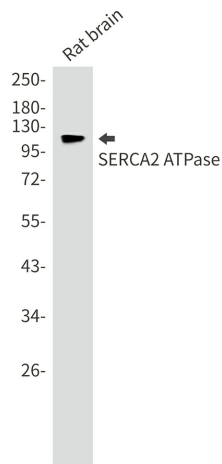
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**Background:**

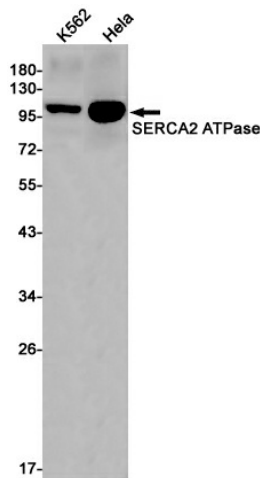
Swiss-Prot Acc.P16615. This magnesium-dependent enzyme catalyzes the hydrolysis of ATP coupled with the translocation of calcium from the cytosol to the sarcoplasmic reticulum lumen. Isoform 2 is involved in the regulation of the contraction/relaxation cycle (PubMed:16402920). Acts as a regulator of TNFSF11-mediated Ca<sup>2+</sup> signaling pathways via its interaction with TMEM64 which is critical for the TNFSF11-induced CREB1 activation and mitochondrial ROS generation necessary for proper osteoclast generation. Association between TMEM64 and SERCA2 in the ER leads to cytosolic Ca<sup>2+</sup> spiking for activation of NFATC1 and production of mitochondrial ROS, thereby triggering Ca<sup>2+</sup> signaling cascades that promote osteoclast differentiation and activation.

**Synonyms:**

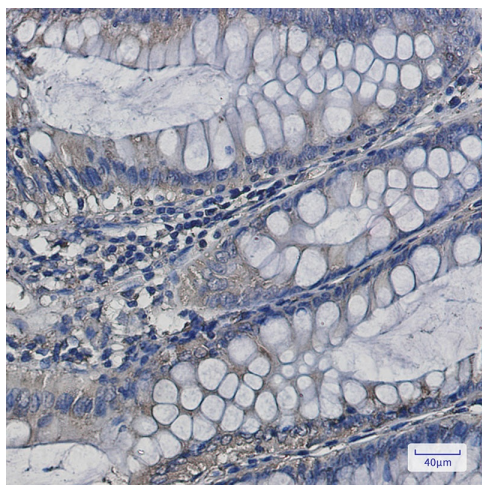
ATP2B; DAR; DD; DKFZp686P0211; FLJ20293; FLJ38063; MGC45367; SERCA2

**Product images:**


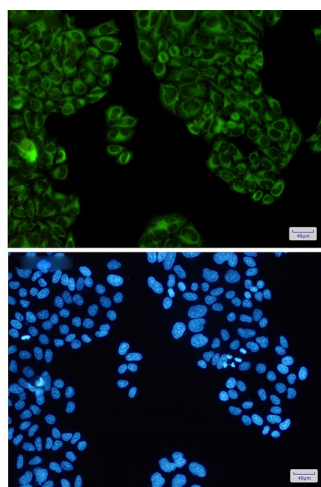
Western blot analysis of SERCA2 ATPase in rat brain lysates using SERCA2 ATPase antibody.



Western blot analysis of SERCA2 ATPase in K562, HeLa lysates using SERCA2 ATPase antibody.



Immunohistochemistry analysis of paraffin-embedded Human colon cancer using SERCA2 ATPase antibody. High-pressure and temperature Sodium Citrate pH 6.0 was used for antigen retrieval.



Immunocytochemistry analysis of SERCA2 ATPase (green) in HeLa using SERCA2 ATPase antibody, and DAPI (blue)