Ryanodine Receptor 2 (RYR2) (pSer2030) pAb

Quality Control Certificate of Analysis
Catalogue No.: A010-32
Unit Size: 50 µl
Lot No: 0813-01

Background: The ryanodine receptor (RyR2) is a Ca^{2+} channel of cardiac muscle that plays a central role in EC coupling. The binding of Ca^{2+} to RyR2 opens the channel and Ca^{2+} stored in the SR moves through the channel into the cytosol to initiate muscle contraction (Bers, 2002). PKA, and not CaMKII, was able to phosphorylate Ser-2030 of RYR2 (Xiao et al., 2005) in vitro and in isolated cardiac myocyte cells.

Description: Lyophilised **Rabbit** polyclonal anti-serum (A010-32) containing IgG antibody specific for Ser-2030 (PKA) phosphorylated RYR2.

Immunogen: Synthetic peptide (TIRGRLLS(PO_3H_2)LVE_{2033}) corresponding to amino acids surrounding the phosphorylated serine residue at position 2030 of RYR2 (human), conjugated to KLH.

Antibody Isotype: IgG.

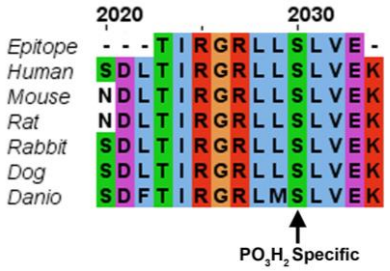
Antibody Purity: Raw Serum.

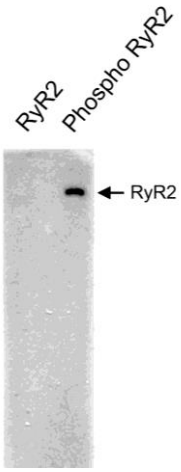
Specificity and Species Cross Reactivity: The antibody recognises RYR2 phosphorylated at serine 2030 and binding is blocked in the presence of a peptide containing the phospho-Ser2030 epitope

Vial Constituents: Lyophilised A010-32 Rabbit anti-serum (50 µl)

Storage Instructions: Lyophilised antibody is stable at 4 °C when stored with desiccant. Reconstitute lyophilised powder in 50 µl of 18 MΩ H_2O, aliquot and store frozen at -80 °C for 1 year. Avoid freeze - thaw cycles.

Tested Applications: **WB 1:1000**





WB using 1:1000 RYR2 Phospho Ser-2013 (A010-32)
against 10µg of HEK cell lysate expressing recombinant RyR2 incubated with PKA +/- ATP
A010-32 detects a single band of RyR2 when phosphorylated by PKA.
6% SDS-PAGE gel, PVDF membrane

Related Products: RYR2 Phospho Ser-2808 anti-serum (A010-30), RYR2 Phospho Ser-2808 (AP) (A010-30AP), RYR2 Phospho Ser-2814 anti-serum (A010-31), RYR2 Phospho Ser-2814 AP (A010-31AP), RYRY Dephospho Ser-2808 (A010-35)

Background References:

- Bers, D. M. (2002) *Nature 415*, 198-205.
- Xiao, B., Jiang, M.T., Zhao, M., Yang, D., Sutherland, C., Lai, A.F., Walsh, M.P., Warltier, D.C., Cheng, H. & Chen, S.R.W. (2005) Circ. Res. 96, 847-55