

Product datasheet for **AP20325PU-M**

Ryanodine receptor 2 (RYR2) Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC
Recommended Dilution:	Immunofluorescence: 1/50-1/200. Immunohistochemistry on Paraffin Sections: 1/50-1/200.
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Immunogen:	Synthetic peptide, corresponding to amino acids 2770-2821 of Human RyR2.
Specificity:	This antibody detects endogenous levels of RyR2 protein.
Formulation:	Phosphate buffered saline (PBS), pH~7.2 containing 0.05% Sodium Azide as preservative. State: Aff - Purified State: Liquid purified Ig fraction (> 95% pure SDS-PAGE).
Concentration:	1.0 mg/ml
Purification:	Affinity Chromatography using epitope-specific immunogen.
Conjugation:	Unconjugated
Storage:	Store undiluted at 2-8°C for one month or (in aliquots) at -20°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: One year from despatch.
Predicted Protein Size:	~ 565 kDa
Gene Name:	ryanodine receptor 2
Database Link:	Entrez Gene 6262 Human Q92736



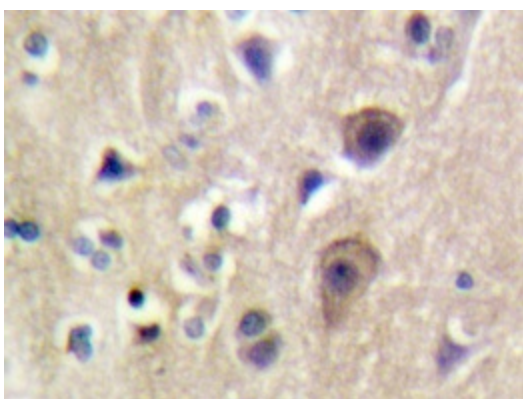
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Background:

Dihydropyridine receptor (DHPR) is a surface membrane protein critical for the excitation-contraction coupling of striated muscle. DHPR and the sarcoplasmic reticulum ryanodine receptor (RyR) are two key components of the intracellular junctions, where depolarization of the surface membrane is converted into the release of Ca^{2+} from internal stores. The $\alpha 1$ -subunit of the DHPR contains a cytoplasmic loop which is thought to be involved in the interactions with RyR. Phosphorylation of the DHPR $\alpha 1$ -subunit is also thought to play a role in the functional interaction of DHPR and RyR. Mutation in DHPR $\alpha 1$ results in excitation-contraction uncoupling, leading to muscular dysgenesis, a complete inactivity in developing skeletal muscles. Cells that do not express RyR also lack excitation-contraction coupling and exhibit a severalfold reduction in Ca^{2+} current density.

Synonyms:

Type 2 ryanodine receptor

Product images:


Immunohistochemistry analyzes of RyR2 antibody in paraffin-embedded human brain tissue.