Product Name: **Plakophilin 2 Rabbit Polyclonal Antibody**
Catalog #: **APRab16237**
For research use only.

Summary

Description	Rabbit polyclonal Antibody
Host	Rabbit
Application	WB,IHC,ELISA
Reactivity	Human,Rat
Conjugation	Unconjugated
Modification	Unmodified
Isotype	IgG
Clonality	Polyclonal
Form	Liquid
Concentration	1mg/ml
Storage	Aliquot and store at -20°C (valid for 12 months). Avoid freeze/thaw cycles.
Shipping	Ice bags
Buffer	Liquid in PBS containing 50% glycerol, 0.5% protective protein and 0.02% New type preservative N.
Purification	Affinity purification

Application

Dilution Ratio	WB 1:500-1:2000,IHC 1:50-1:300,ELISA 1:2000-1:20000
Molecular Weight	97kDa

Antigen Information

Gene Name	PKP2
Alternative Names	PKP2; Plakophilin-2
Gene ID	5318.0
SwissProt ID	Q99959
Immunogen	The antiserum was produced against synthesized peptide derived from human PKP2. AA range:632-681

Background

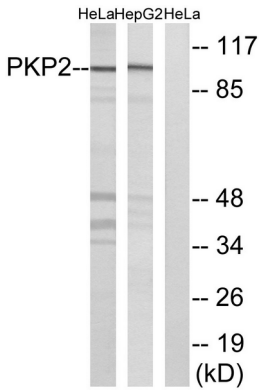
This gene encodes a member of the arm-repeat (armadillo) and plakophilin gene families. Plakophilin proteins contain

numerous armadillo repeats, localize to cell desmosomes and nuclei, and participate in linking cadherins to intermediate filaments in the cytoskeleton. This gene product may regulate the signaling activity of beta-catenin. Two alternately spliced transcripts encoding two protein isoforms have been identified. A processed pseudogene with high similarity to this locus has been mapped to chromosome 12p13. [provided by RefSeq, Jul 2008],disease:Defects in PKP2 are the cause of familial arrhythmogenic right ventricular dysplasia 9 (ARVD9) [MIM:609040]; also known as arrhythmogenic right ventricular cardiomyopathy 9 (ARVC9). ARVD is an autosomal dominant disease characterized by partial degeneration of the myocardium of the right ventricle, electrical instability, and sudden death. It is clinically defined by electrocardiographic and angiographic criteria; pathologic findings, replacement of ventricular myocardium with fatty and fibrous elements, preferentially involve the right ventricular free wall.,function:May play a role in junctional plaques.,PTM:Phosphorylated upon DNA damage, probably by ATM or ATR.,similarity:Belongs to the beta-catenin family.,similarity:Contains 8 ARM repeats.,subcellular location:Nuclear and associated with desmosomes.,tissue specificity:Widely expressed. Found at desmosomal plaques in simple and stratified epithelia and in non-epithelial tissues such as myocardium and lymph node follicles. In most stratified epithelia found in the desmosomes of the basal cell layer and seems to be absent from suprabasal strata.,

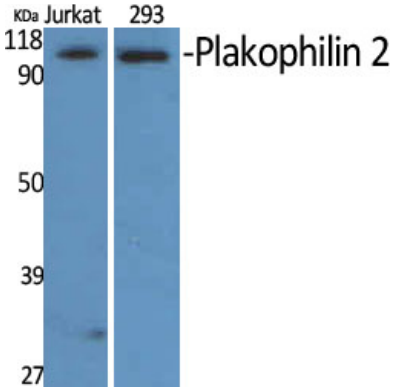
Research Area

Arrhythmogenic right ventricular cardiomyopathy (ARVC);

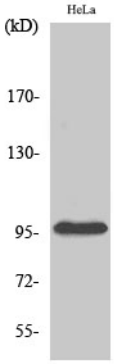
Image Data



Western blot analysis of lysates from HeLa and HepG2 cells, using PKP2 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of various cells using Plakophilin 2 Polyclonal Antibody diluted at 1： 500 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit （SC-003,Inventbiotech,MN,USA）.



Western Blot analysis of HepG2 cells using Plakophilin 2 Polyclonal Antibody diluted at 1： 500 cells nucleus extracted by Minute TM Cytoplasmic and Nuclear Fractionation kit （SC-003,Inventbiotech,MN,USA）.