

Datasheet for ABIN5693297

anti-RPGR antibody (AA 13-338)





Overview

Quantity:	100 μg
Target:	RPGR
Binding Specificity:	AA 13-338
Reactivity:	Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This RPGR antibody is un-conjugated
Application:	Western Blotting (WB), ELISA

Product Details

Purpose:	Anti-RPGR Antibody Picoband®
Immunogen:	E. coli-derived human RPGR recombinant protein (Position: A13-F338).
Isotype:	IgG
Cross-Reactivity (Details):	No cross-reactivity with other proteins.
Characteristics:	Anti-RPGR Antibody Picoband® (ABIN5693297). Tested in ELISA, WB applications. This antibody reacts with Rat. The brand Picoband indicates this is a premium antibody that guarantees superior quality, high affinity, and strong signals with minimal background in Western blot applications. Only our best-performing antibodies are designated as Picoband, ensuring unmatched performance.

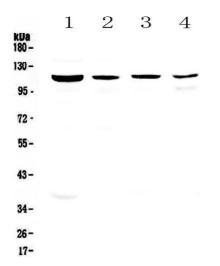
Target Details

Target:	RPGR
Alternative Name:	RPGR (RPGR Products)
Background:	Synonyms: X-linked retinitis pigmentosa GTPase regulator, RPGR, RP3, XLRP3
	Tissue Specificity: Heart, brain, placenta, lung, liver, muscle, kidney, retina, pancreas and fetal
	retinal pigment epithelium. Isoform 3 is found only in the retina. Colocalizes with RPGRIP1 in
	the outer segment of rod photoreceptors and cone outer segments.
	Background: X-linked retinitis pigmentosa GTPase regulator is a GTPase-binding protein that in
	humans is encoded by the RPGR gene. This gene encodes a protein with a series of six RCC1-
	like domains (RLDs), characteristic of the highly conserved guanine nucleotide exchange
	factors. The encoded protein is found in the Golgi body and interacts with RPGRIP1. This
	protein localizes to the outer segment of rod photoreceptors and is essential for their viability.
	Mutations in this gene have been associated with X-linked retinitis pigmentosa (XLRP). Multiple
	alternatively spliced transcript variants that encode different isoforms of this gene have been
	reported, but the full-length natures of only some have been determined.
Molecular Weight:	113 kDa
Gene ID:	6103
UniProt:	Q92834
Application Details	
Application Notes:	Western blot, 0.1-0.5 μg/mL
	ELISA, 0.1-0.5 μg/mL
	1. "Entrez Gene: RPGR retinitis pigmentosa GTPase regulator". 2. Murga-Zamalloa CA, Atkins
	SJ, Peranen J, Swaroop A, Khanna H (Sep 2010). "Interaction of retinitis pigmentosa GTPase
	regulator (RPGR) with RAB8A GTPase: implications for cilia dysfunction and photoreceptor
	degeneration". Human Molecular Genetics. 19 (18): 3591-8.
Restrictions:	For Research Use only
Handling	
Format:	Lyophilized
Reconstitution:	Add 0.2 mL of distilled water will yield a concentration of 500 μg/mL.
Concentration:	500 μg/mL
Buffer:	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na ₂ HPO ₄ , 0.05 mg NaN ₃ .

Handling

Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	4 °C,-20 °C
Storage Comment:	Store at -20°C for one year from date of receipt. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for six months. Avoid repeated freeze-thaw cycles.

Images



Western Blotting

Image 1. Western blot analysis of RPGR using anti-RPGR antibody. Electrophoresis was performed on a 5-20% SDS-PAGE gel at 70V (Stacking gel) / 90V (Resolving gel) for 2-3 hours. The sample well of each Lane was loaded with 50ug of sample under reducing conditions. Lane 1: rat liver tissue lysates, Lane 2: rat kidney tissue lysates, Lane 3: rat brain tissue lysates, Lane 4: rat heart tissue lysates. After Electrophoresis, proteins were transferred to Nitrocellulose membrane at 150mA for 50-90 minutes. Blocked the membrane with 5% Non-fat Milk/ TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-RPGR antigen affinity purified polyclonal antibody (Catalog #) at 0.5 μ g/mL overnight at 4°C, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:10000 for 1.5 hour at RT. The signal is developed using an Enhanced Chemiluminescent detection (ECL) kit (Catalog # EK1002) with Tanon 5200 system. A specific band was detected for RPGR at approximately 113KD. The expected band size for RPGR is at 113KD.