

ARG42957 anti-RP2 / XRP2 antibody

Package: 50 µg
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes RP2 / XRP2
Tested Reactivity	Hu, Ms, Rat
Tested Application	FACS, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	RP2 / XRP2
Species	Human
Immunogen	Recombinant protein corresponding to D244-M348 of Human RP2 / XRP2.
Conjugation	Un-conjugated
Alternate Names	TBCCD2; Protein XRP2; XRP2; DELXp11.3; NM23-H10; NME10

Application Instructions

Application table	Application	Dilution
	FACS	1:150 - 1:500
	IHC-P	1:200 - 1:1000
	WB	1:500 - 1:2000
Application Note	IHC-P: Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 39 kDa	

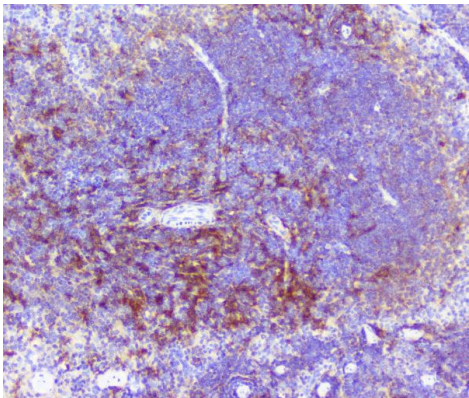
Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na2HPO4, 0.9% NaCl, 0.05% Sodium azide and 4% Trehalose.
Preservative	0.05% Sodium azide
Stabilizer	4% Trehalose
Concentration	0.5 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

Bioinformation

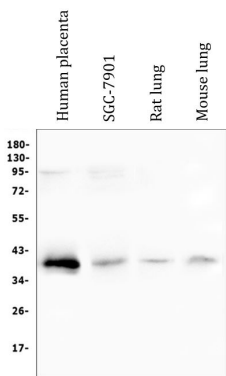
Gene Symbol	RP2
Gene Full Name	retinitis pigmentosa 2 (X-linked recessive)
Background	The RP2 locus has been implicated as one cause of X-linked retinitis pigmentosa. The predicted gene product shows homology with human cofactor C, a protein involved in the ultimate step of beta-tubulin folding. Progressive retinal degeneration may therefore be due to the accumulation of incorrectly-folded photoreceptor or neuron-specific tubulin isoforms followed by progressive cell death [provided by RefSeq, Jul 2008]
Function	Acts as a GTPase-activating protein (GAP) involved in trafficking between the Golgi and the ciliary membrane. Involved in localization of proteins, such as NPHP3, to the cilium membrane by inducing hydrolysis of GTP ARL3, leading to the release of UNC119 (or UNC119B). Acts as a GTPase-activating protein (GAP) for tubulin in concert with tubulin-specific chaperone C, but does not enhance tubulin heterodimerization. Acts as guanine nucleotide dissociation inhibitor towards ADP-ribosylation factor-like proteins. [UniProt]
Calculated Mw	40 kDa
PTM	Myristoylated on Gly-2; which may be required for membrane targeting. Palmitoylated on Cys-3; which may be required for plasma membrane targeting (Probable). Mutation of Cys-3 targets the protein to internal membranes. [UniProt]
Cellular Localization	Cell membrane; Lipid-anchor; Cytoplasmic side. Cell projection, cilium. Note=Detected predominantly at the plasma membrane of rod and cone photoreceptors. Not detected in the nucleus. [UniProt]

Images



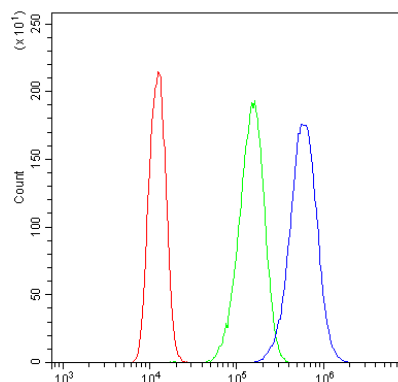
ARG42957 anti-RP2 / XRP2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Mouse spleen tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42957 anti-RP2 / XRP2 antibody at 1 µg/ml dilution, overnight at 4°C.



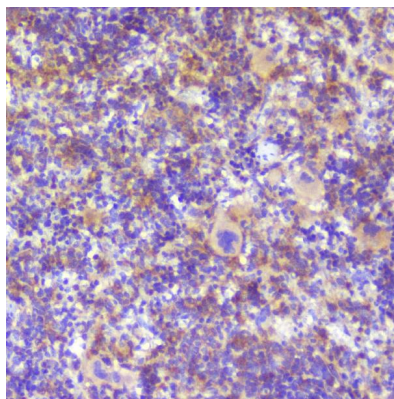
ARG42957 anti-RP2 / XRP2 antibody WB image

Western blot: 50 µg of sample under reducing conditions. Human placenta, SGC-7901, Rat lung and Mouse lung lysates stained with ARG42957 anti-RP2 / XRP2 antibody at 0.5 µg/ml dilution, overnight at 4°C.



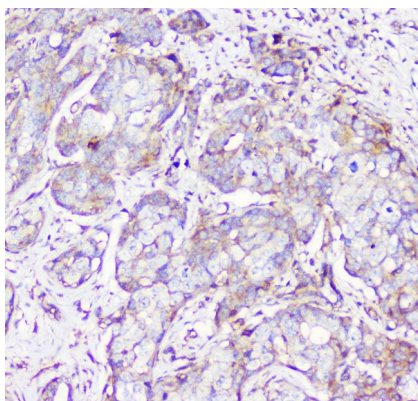
ARG42957 anti-RP2 / XRP2 antibody FACS image

Flow Cytometry: A431 cells were blocked with 10% normal goat serum and then stained with ARG42957 anti-RP2 / XRP2 antibody (blue) at 1 $\mu\text{g}/10^6$ cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 $\mu\text{g}/10^6$ cells) used under the same conditions. Unlabelled sample (red) was also used as a control.



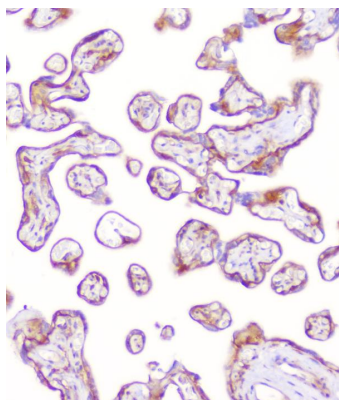
ARG42957 anti-RP2 / XRP2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Rat spleen tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42957 anti-RP2 / XRP2 antibody at 1 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



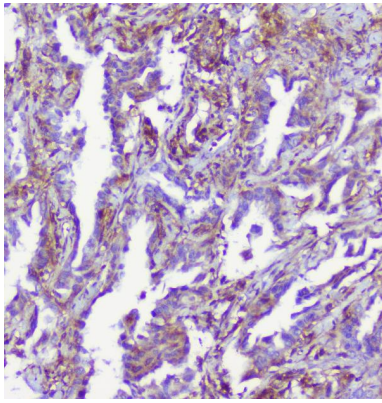
ARG42957 anti-RP2 / XRP2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human mammary cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42957 anti-RP2 / XRP2 antibody at 1 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



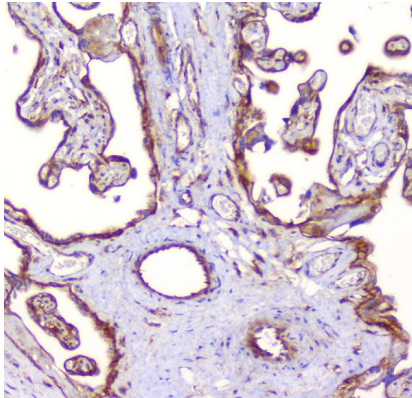
ARG42957 anti-RP2 / XRP2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42957 anti-RP2 / XRP2 antibody at 1 $\mu\text{g}/\text{ml}$ dilution, overnight at 4°C.



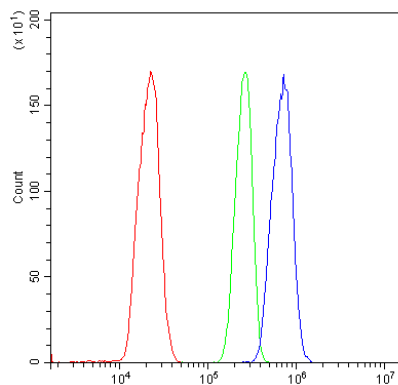
ARG42957 anti-RP2 / XRP2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human lung cancer tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42957 anti-RP2 / XRP2 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG42957 anti-RP2 / XRP2 antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Heat mediation was performed in Citrate buffer (pH 6.0) for 20 min. The tissue section was blocked with 10% goat serum. The tissue section was then stained with ARG42957 anti-RP2 / XRP2 antibody at 1 µg/ml dilution, overnight at 4°C.



ARG42957 anti-RP2 / XRP2 antibody FACS image

Flow Cytometry: THP-1 cells were blocked with 10% normal goat serum and then stained with ARG42957 anti-RP2 / XRP2 antibody (blue) at 1 µg/ 10^6 cells for 30 min at 20°C, followed by incubation with DyLight®488 labelled secondary antibody. Isotype control antibody (green) was Rabbit IgG (1 µg/ 10^6 cells) used under the same conditions. Unlabelled sample (red) was also used as a control.