

## ARG42970 anti-RP2 / XRP2 antibody [3D7]

Package: 50 µg  
Store at: -20°C

### Summary

Product Description	Mouse Monoclonal antibody [3D7] recognizes RP2 / XRP2
Tested Reactivity	Hu
Tested Application	FACS, ICC/IF, WB
Host	Mouse
Clonality	Monoclonal
Clone	3D7
Isotype	IgG2b
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 - 3 µg / 1 x 10 <sup>6</sup>
	ICC/IF	2 µg/ml
	WB	0.1 - 0.5 µg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Observed Size	~ 40 kDa	

### Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	0.2% Na <sub>2</sub> HPO <sub>4</sub> , 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.

**Note** For laboratory research only, not for drug, diagnostic or other use.

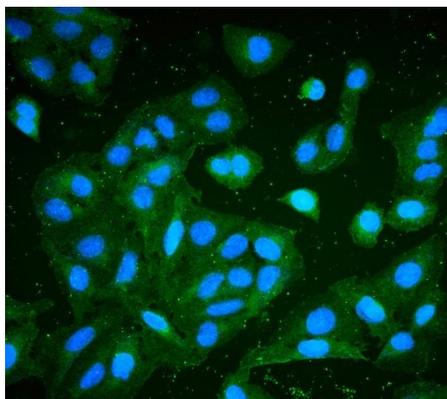
## Bioinformation

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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]

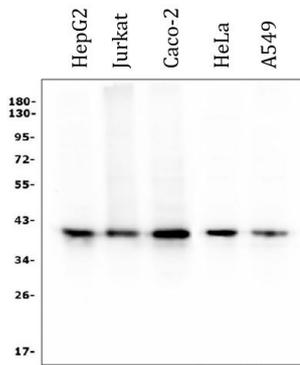
## Images

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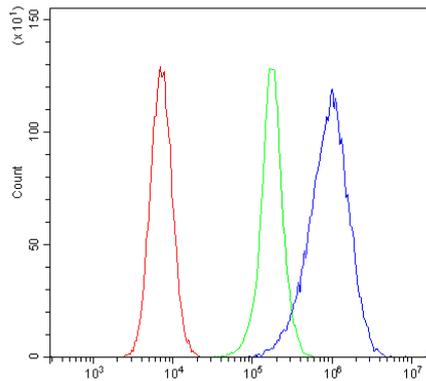
ARG42970 anti-RP2 / XRP2 antibody [3D7] ICC/IF image

Immunofluorescence: U2OS stained with ARG42970 anti-RP2 / XRP2 antibody [3D7] at 2 µg/mL dilution.



#### ARG42970 anti-RP2 / XRP2 antibody [3D7] WB image

Western blot: 50  $\mu$ g of sample under reducing conditions. HepG2, Jurkat, Caco-2, HeLa and A549 whole cell lysates stained with ARG42970 anti-RP2 / XRP2 antibody [3D7] at 0.5  $\mu$ g/ml dilution, overnight at 4°C.



#### ARG42970 anti-RP2 / XRP2 antibody [3D7] FACS image

Flow Cytometry: 293T cells were blocked with 10% normal goat serum and then stained with ARG42970 anti-RP2 / XRP2 antibody [3D7] (blue) at 1  $\mu$ g/ $10^6$  cells for 30 min at 20°C, followed by incubation with DyLight<sup>®</sup>488 labelled secondary antibody. Isotype control antibody (green) was Mouse IgG (1  $\mu$ g/ $10^6$  cells) used under the same conditions. Unlabelled sample (red) was also used as a control.