

# Product datasheet

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ARG64529 anti-FMRP antibody

Package: 100 μg Store at: -20°C

### **Summary**

Product Description Goat Polyclonal antibody recognizes FMRP

Tested Reactivity Hu

Predict Reactivity Ms, Rat, Dog

Tested Application IHC-P, WB

Host Goat

**Clonality** Polyclonal

Isotype IgG

Target Name FMRP
Species Human

Immunogen C-RTGKDRNQKKEKPD

Conjugation Un-conjugated

Alternate Names POF1; Fragile X mental retardation protein 1; FRAXA; Protein FMR-1; POF; FMRP

# **Application Instructions**

Application table	Application	Dilution
	IHC-P	2.5 μg/ml
	WB	0.1 - 0.3 μg/ml
	WB: Recommend incubate at RT for 1h.  IHC-P: Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0).  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Purified from goat serum by antigen affinity chromatography.

Buffer Tris saline (pH 7.3), 0.02% Sodium azide and 0.5% BSA.

Preservative 0.02% Sodium azide

Stabilizer 0.5% BSA

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

Database links <u>GeneID: 2332 Human</u>

Swiss-port # Q06787 Human

Background The protein encoded by this gene binds RNA and is associated with polysomes. The encoded protein

may be involved in mRNA trafficking from the nucleus to the cytoplasm. A trinucleotide repeat (CGG) in the 5' UTR is normally found at 6-53 copies, but an expansion to 55-230 repeats is the cause of fragile X syndrome. Expansion of the trinucleotide repeat may also cause one form of premature ovarian failure (POF1). Multiple alternatively spliced transcript variants that encode different protein isoforms and which are located in different cellular locations have been described for this gene. [provided by RefSeq,

May 2010]

Research Area Gene Regulation antibody; Neuroscience antibody

Calculated Mw 71 kDa

PTM Phosphorylated (PubMed:14532325). Phosphorylated on several serine residues. Phosphorylation at

Ser-500 is required for phosphorylation of other nearby serine residues. Phosphorylation has no effect on the binding of individual mRNA species, but may affect the association with polyribosome. Unphosphorylated FMR1 is associated with actively translating polyribosome, whereas a fraction of phosphorylated FMR1 is associated with apparently stalled polyribosome. Dephosphorylation by an activated phosphatase may release the FMR1-mediated translational repression and allow synthesis of

a locally required protein at snypases (By similarity).

Monoubiquitinated. Polyubiquitinated. Ubiquitinated and targeted for proteasomal degradation after

activation of metabotropic glutamate receptor (mGluR).

Methylated; methylation is necessary for heterodimerization with FXR1, association with polyribosomes, recruitment into stress granules and translation of FMR1 target mRNAs (PubMed:16636078). Methylated by PRMT1, PRMT3 and PRMT4, in vitro (PubMed:16922515). Isoform 10: Undergoes proteolytic cleavage; may be specifically cleaved by calpain-1/CAPN1 in cajal

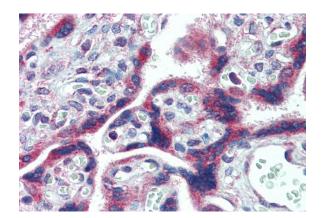
bodies (PubMed:24204304).

### **Images**

250kDa 150kDa 100kDa 75kDa 50kDa 37kDa 25kDa 20kDa

### ARG64529 anti-FMRP antibody WB image

Western blot: 35  $\mu g$  of KELLY cell lysate stained with ARG64529 anti-FMRP antibody at 0.1  $\mu g/ml$  dilution.



# ARG64529 anti-FMRP antibody IHC-P image

Immunohistochemistry: Paraffin-embedded Human placenta tissue. Antigen Retrieval: Steam tissue section in Citrate buffer (pH 6.0). The tissue section was stained with ARG64529 anti-FMRP antibody at 2.5  $\mu g/ml$  dilution followed by AP-staining.