

## ARG41818 anti-PABPN1 antibody

Package: 100 μl Store at: -20°C

# Summary

| Product Description | Rabbit Polyclonal antibody recognizes PABPN1  |
|---------------------|---|
| Tested Reactivity   | Hu, Ms  |
| Tested Application  | FACS, IHC-P, IP, WB   |
| Host                | Rabbit  |
| Clonality           | Polyclonal  |
| lsotype             | lgG   |
| Target Name         | PABPN1  |
| Species             | Human   |
| Immunogen           | Synthetic peptide of Human PABPN1.  |
| Conjugation         | Un-conjugated   |
| Alternate Names     | A; PABII; PAB2; Polyadenylate-binding protein 2; OPMD; Polyadenylate-binding nuclear protein 1; Poly; PABP-2; Nuclear poly; PABP2 |

# **Application Instructions**

| Application table | Application  | Dilution       |
|-------------------|--|----------------|
|                   | FACS   | 1:50           |
|                   | IHC-P  | 1:50 - 1:200   |
|                   | IP   | 1:50           |
|                   | WB   | 1:500 - 1:2000 |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                |
| Positive Control  | HeLa   |                |
| Observed Size     | ~ 47 kDa   |                |

## Properties

| Form                | Liquid   |
|---------------------|--|
| Purification        | Affinity purified.   |
| Buffer              | PBS (pH 7.4), 150 mM NaCl, 0.02% Sodium azide and 50% Glycerol.  |
| Preservative        | 0.02% Sodium azide   |
| Stabilizer          | 50% Glycerol   |
| 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. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw |

Note

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

# Bioinformation

| Gene Symbol           | PABPN1   |
|-----------------------|--|
| Gene Full Name        | poly(A) binding protein, nuclear 1   |
| Background            | This gene encodes an abundant nuclear protein that binds with high affinity to nascent poly(A) tails. The protein is required for progressive and efficient polymerization of poly(A) tails at the 3' ends of eukaryotic transcripts and controls the size of the poly(A) tail to about 250 nt. At steady-state, this protein is localized in the nucleus whereas a different poly(A) binding protein is localized in the cytoplasm. This gene contains a GCG trinucleotide repeat at the 5' end of the coding region, and expansion of this repeat from the normal 6 copies to 8-13 copies leads to autosomal dominant oculopharyngeal muscular dystrophy (OPMD) disease. Related pseudogenes have been identified on chromosomes 19 and X. Read-through transcription also exists between this gene and the neighboring upstream BCL2-like 2 (BCL2L2) gene. [provided by RefSeq, Dec 2010] |
| Function              | Involved in the 3'-end formation of mRNA precursors (pre-mRNA) by the addition of a poly(A) tail of 200-250 nt to the upstream cleavage product. Stimulates poly(A) polymerase (PAPOLA) conferring processivity on the poly(A) tail elongation reaction and controls also the poly(A) tail length. Increases the affinity of poly(A) polymerase for RNA. Is also present at various stages of mRNA metabolism including nucleocytoplasmic trafficking and nonsense-mediated decay (NMD) of mRNA. Cooperates with SKIP to synergistically activate E-box-mediated transcription through MYOD1 and may regulate the expression of muscle-specific genes. Binds to poly(A) and to poly(G) with high affinity. May protect the poly(A) tail from degradation (By similarity). [UniProt]  |
| Calculated Mw         | 33 kDa   |
| PTM                   | Arginine dimethylation is asymmetric and involves PRMT1 and PRMT3. It does not influence the RNA binding properties (By similarity). [UniProt]   |
| Cellular Localization | Nucleus. Cytoplasm. Nucleus speckle. Note=Localized in cytoplasmic mRNP granules containing untranslated mRNAs. Shuttles between the nucleus and the cytoplasm but predominantly found in the nucleus. Its nuclear import may involve the nucleocytoplasmic transport receptor transportin and a RAN-GTP-sensitive import mechanism. Is exported to the cytoplasm by a carrier-mediated pathway that is independent of mRNA traffic. [UniProt]   |

### Images



### ARG41818 anti-PABPN1 antibody WB image

Western blot: HeLa cell lysate stained with ARG41818 anti-PABPN1 antibody.