

## Anti-Importin $\alpha 3$ / KPNA4/Qip1 antibody, rat monoclonal (3D10)

70-325, 200 ug

Importin  $\alpha$  proteins play a pivotal role in the import of proteins from the cytoplasm to the nucleus. Importin  $\alpha$  proteins shuttle between nucleus and cytoplasm, bind nuclear localization signal (NLS)-bearing proteins, and mediate the protein import into the nucleus with importin  $\beta$ . Several importin  $\alpha$  isoforms have been identified, each exhibiting differential recognition and nuclear transport, probably via preferential binding to a particular NLS. The **importin  $\alpha 3$  (KPNA4, Qip1)** is a member of the importin  $\alpha$  family of proteins belonging to the Qip1 subfamily.

The antibody was purified from the serum-free cultured medium of the hybridoma under mild conditions by proprietary chromatography processes.

### Applications:

1. Western blotting (250~500 fold dilution)
2. ELISA

This antibody doesn't work for immunostaining and immunoprecipitation.

**Immunogen:** Recombinant mouse importin  $\alpha 3$  /KPNA4/ Qip 1 (full length)

**Epitope:** Not determined

**Isotype:** Rat IgG2a, kappa

**Form:** Purified monoclonal antibody (IgG) 1mg/ml in PBS, 50% glycerol, filter-sterilized

**Specificity:** Reactive with human, simian, mouse, rat, hamster, canine and bovine importin  $\alpha 3$ . This antibody doesn't recognize other importin  $\alpha$  family including  $\alpha 4$ .

**Storage:** Shipped at 4°C or -20°C, and upon arrival, aliquot and store at -20°C.

**Data Link:** [t uniprot/O35343](https://www.uniprot.org/entry/O35343) mouse importin  $\alpha 3$

**References:** This antibody was produced and used in Ref.3 and 4.

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3. Sakaguchi N *et al* "Generation of a rat monoclonal antibody specific for importin alpha3/Qip1." *Hybrid Hybridomics* **22**: 397-400 (2003) PMID: [14683601](https://pubmed.ncbi.nlm.nih.gov/14683601/)
4. Yasuhara N *et al* "Triggering neural differentiation of ES cells by subtype switching of importin-alpha." *Nat Cell Biol* **9**:72-79 (2007) PMID: [17159997](https://pubmed.ncbi.nlm.nih.gov/17159997/)

to be continued ...



COSMO BIO CO., LTD.

TOKYO JAPAN

TEL : (81)3-5632-9617

FAX : (81)3-5632-9618

e-mail : [export@cosmobio.co.jp](mailto:export@cosmobio.co.jp)



[www.cosmobio.com](http://www.cosmobio.com)

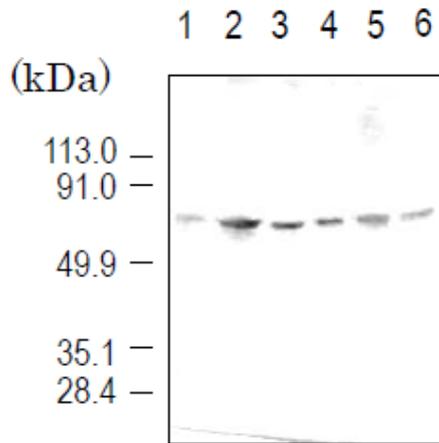


Fig.1

Detection of importin  $\alpha$ 3 (58 kD) by Western blotting using the antibody 3D10.

Sample is the total cell extract.

lane1: HeLa (human)

lane2: COS7 (simian)

lane3: L929 (mouse)

lane4: NRK (rat)

lane5: BHK (hamster)

lane6: MDBK (bovine)

