Anti-Importin α3 / KPNA4/Qip1 antibody, rat monoclonal (3D10)

70-325, 200 ug

Importin α proteins play a pivotal role in the import of proteins from the cytoplasm to the nucleus. Importin α proteins shuttle between nucleus and cytoplasm, bind nuclear localization signal (NLS)-bearing proteins, and mediate the protein import into the nucleus with importin β. Several importin α isotypes have been identified, each exhibiting differential recognition and nuclear transport, probably via preferential binding to a particular NLS. The **importin α3 (KPNA4, Qip1)** is a member of the importin α 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 α3 /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 α3. This antibody doesn't recognize other importin α family including α4.

Storage: Shipped at 4℃ or -20℃, and upon arrival, aliquot and store at -20℃.

Data Link: t uniprot/O35343 mouse importin α 3

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

1. Yoneda Y "Nucleocytoplasmic protein traffic and its significance to cell function." Review. *Genes Cells* **5**: 777-787 (2000) PMID: 11029654
2. Miyamoto Y et al "Differential modes of nuclear localization signal (NLS) recognition by three distinct classes of NLS receptors."*J Bio Chem* **272**:26375-26381 (1997) PMID: 9334211
3. Sakaguchi N *et al* "Generation of a rat monoclonal antibody specific for importin alpha3/Qip1." *Hybrid Hybridomics* **22**: 397-400 (2003) PMID: 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

to be continued …

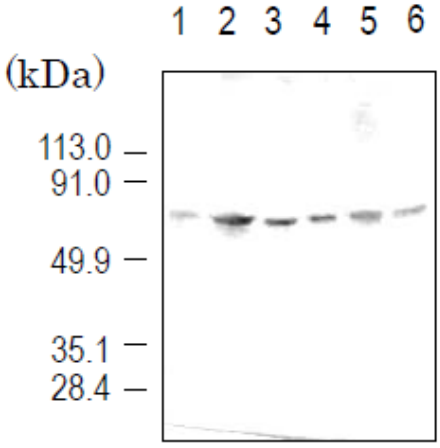

Fig.1

Detection of importin α3 (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)