

QIP1 (2500D3a): sc-81364

BACKGROUND

QIP1, also known as KPNA4 (karyopherin α 4), IPOA3 (Importin α 3) or SRP3, is a member of the Importin α family. It is involved in nuclear import and forms a complex with the Importin β protein, karyopherin β 1, functioning as its adapter protein. QIP1 binds to substrates containing nuclear localization signal (NLS) motifs, while karyopherin β 1 facilitates the binding of the Importin/substrate complex to the nuclear pore complex (NPC). Subsequently, the importin/substrate complex is translocated through the pore via a Ran-dependent mechanism. QIP1 contains one IBB domain at its hydrophilic N-terminus, which is required for binding karyopherin β 1, and ten ARM repeats in its hydrophobic central region. QIP1 is expressed at high levels in pancreas, lung, ovary, testis, small intestine, heart and skeletal muscle, exhibiting both cytoplasmic and nuclear localization.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: KPNA4 (human) mapping to 3q25.33.

SOURCE

QIP1 (2500D3a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to the N-terminal region of QIP1 of human origin.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PRODUCT

Each vial contains 100 μ g IgG_{2a} in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% BSA.

APPLICATIONS

QIP1 (2500D3a) is recommended for detection of QIP1 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for QIP1 siRNA (h): sc-62916, QIP1 shRNA Plasmid (h): sc-62916-SH and QIP1 shRNA (h) Lentiviral Particles: sc-62916-V.

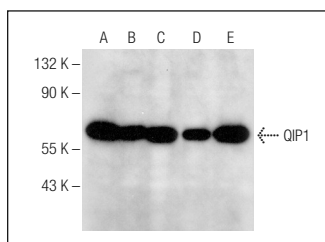
Molecular Weight of QIP1: 58 kDa.

Positive Controls: Ramos cell lysate: sc-2216, HeLa whole cell lysate: sc-2200 or K-562 whole cell lysate: sc-2203.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



QIP1 (2500D3a): sc-81364. Western blot analysis of QIP1 expression in K-562 (A), HeLa (B), Ramos (C), MOLT-4 (D) and NCI-H1299 (E) whole cell lysates.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.