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# QIP1 (h2): 293T Lysate: sc-172097

## BACKGROUND

QIP1, also known as KPNA4 (karyopherin  $\alpha 4$ ), IPOA3 (importin  $\alpha 3$ ) or SRP3, is a member of the Importin  $\alpha$  family. It is involved in nuclear import and forms a complex with the importin  $\beta$  protein, karyopherin  $\beta 1$ , functioning as its adapter protein. QIP1 binds to substrates containing nuclear localization signal (NLS) motifs, while karyopherin  $\beta 1$  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  $\beta 1$ , 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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## STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

## CHROMOSOMAL LOCATION

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

## PRODUCT

QIP1 (h2): 293T Lysate represents a lysate of human QIP1 transfected 293T cells and is provided as 100  $\mu$ g protein in 200  $\mu$ l SDS-PAGE buffer.

## APPLICATIONS

QIP1 (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive QIP1 antibodies. Recommended use: 10-20  $\mu$ l per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

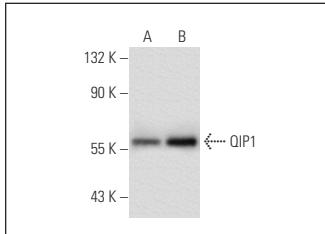
QIP1 (3D10): sc-101547 is recommended as a positive control antibody for Western Blot analysis of enhanced human QIP1 expression in QIP1 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended:

1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

## DATA



QIP1 (3D10): sc-101547. Western blot analysis of QIP1 expression in non-transfected: sc-117752 (**A**) and human QIP1 transfected: sc-172097 (**B**) 293T whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.