

# p115 (H-300): sc-25589

## BACKGROUND

The mammalian protein p115, known also as transcytosis-associated protein (TAP)/tethering factor/vesicle docking protein and its yeast homologue Uso1p have an essential role in membrane trafficking. p115 is phosphorylated in interphase but not in mitotic cells. Phosphorylated p115 is localized to the cytosol, whereas the unphosphorylated form is associated with membranes, mostly of the Golgi complex. Upon phosphorylation of p115 at Ser942, p115 is released from the membranes. In mammary glands, p115 synthesis is dependent of the stage of lactation. Both giantin and GM130 compete for binding to the C-terminal acidic domain of p115, and p115-giantin and p115-GM130 interactions mediate independent membrane tethering events. The amino terminal region of p115 is required for its localization to the Golgi. p115 is also expressed on transcytotic vesicles, where p115 is required for vesicle fusion with the target membrane and vesicular tubular clusters, which are involved in ER to Golgi transport. Rab1 recruits p115 to coat protein complex II (COPII) vesicles during budding from the endoplasmic reticulum, where it interacts with a select set of SNAREs. p115 is a general factor acting within the secretory and endocytic pathways to bind transport vesicles prior to membrane fusion.

## CHROMOSOMAL LOCATION

Genetic locus: USO1 (human) mapping to 4q21.1; Uso1 (mouse) mapping to 5 E2.

## SOURCE

p115 (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 of p115 of human origin.

## PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

p115 (H-300) is recommended for detection of p115 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

p115 (H-300) is also recommended for detection of p115 in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for p115 siRNA (h): sc-41281, p115 siRNA (m): sc-41283, p115 shRNA Plasmid (h): sc-41281-SH, p115 shRNA Plasmid (m): sc-41283-SH, p115 shRNA (h) Lentiviral Particles: sc-41281-V and p115 shRNA (m) Lentiviral Particles: sc-41283-V.

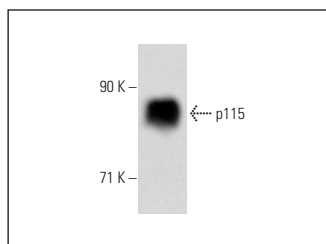
Molecular Weight of p115: 115 kDa.

Positive Controls: rat liver extract: sc-2395, Hep G2 cell lysate: sc-2227 or HeLa whole cell lysate: sc-2200.

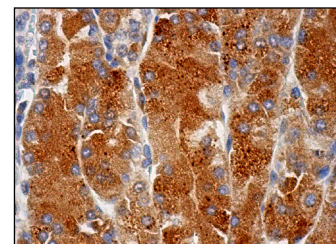
## RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



p115 (H-300): sc-25589. Western blot analysis of p115 expression in Hep G2 whole cell lysate.



p115 (H-300): sc-25589. Immunoperoxidase staining of formalin fixed, paraffin-embedded human stomach tissue showing cytoplasmic staining of glandular cells.

## SELECT PRODUCT CITATIONS

1. Lee, I., et al. 2014. Membrane adhesion dictates Golgi stacking and cisternal morphology. Proc. Natl. Acad. Sci. USA 111: 1849-1854.

## STORAGE

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

## 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) or our catalog for detailed protocols and support products.


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Try **p115 (H-11): sc-48363** or **p115 (5D6): sc-20021**, our highly recommended monoclonal alternatives to p115 (H-300).