

# epiplakin 1 (T-16): sc-87104

## BACKGROUND

Epiplakin 1, also known as EPPK1 or EPIPL, is a 5,065 amino acid protein that localizes to both the cytoplasm and the cytoskeleton and contains 65 Plectin repeats. One of several members of the cytolinker family, epiplakin 1 is expressed at high levels in colon, liver, stomach, intestine and salivary glands and is encoded by a gene which maps to human chromosome 8. Consisting of nearly 146 million base pairs, chromosome 8 encodes over 800 genes and is associated with a variety of diseases and malignancies. Schizophrenia, bipolar disorder, trisomy 8, Pfeiffer syndrome, congenital hypothyroidism, Waardenburg syndrome and some leukemias and lymphomas are thought to occur as a result of defects in specific genes that map to chromosome 8.

## REFERENCES

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3. Kashino, G., et al. 2001. Preferential expression of an intact WRN gene in Werner syndrome cell lines in which a normal chromosome 8 has been introduced. *Biochem. Biophys. Res. Commun.* 289: 111-115.
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5. Selicorni, A., et al. 2002. Cytogenetic mapping of a novel locus for type II Waardenburg syndrome. *Hum. Genet.* 110: 64-67.
6. Spazierer, D., et al. 2003. Epiplakin gene analysis in mouse reveals a single exon encoding a 725-kDa protein with expression restricted to epithelial tissues. *J. Biol. Chem.* 278: 31657-31666.
7. Takeo, N., et al. 2003. Structure and heterogeneity of the human gene for epiplakin (EPPK1). *J. Invest. Dermatol.* 121: 1224-1226.
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## CHROMOSOMAL LOCATION

Genetic locus: EPPK1 (human) mapping to 8q24.3; Eppk1 (mouse) mapping to 15 D3.

## SOURCE

epiplakin 1 (T-16) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N-terminus of epiplakin 1 of human origin.

## STORAGE

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

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-87104 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## APPLICATIONS

epiplakin 1 (T-16) is recommended for detection of epiplakin 1 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

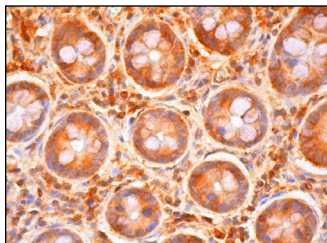
Suitable for use as control antibody for epiplakin 1 siRNA (h): sc-77799, epiplakin 1 siRNA (m): sc-144910, epiplakin 1 shRNA Plasmid (h): sc-77799-SH, epiplakin 1 shRNA Plasmid (m): sc-144910-SH, epiplakin 1 shRNA (h) Lentiviral Particles: sc-77799-V and epiplakin 1 shRNA (m) Lentiviral Particles: sc-144910-V.

Molecular Weight of epiplakin 1: 552 kDa.

## 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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

## DATA



epiplakin 1 (T-16): sc-87104. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic staining of glandular cells and interstitial cells.

## RESEARCH USE

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