

# connexin 30.3 (F6): sc-81802

## BACKGROUND

The connexin family of proteins form hexameric complexes called "connexons" that facilitate movement of low molecular weight proteins between cells via gap junctions. Connexin proteins share a common topology of four transmembrane  $\alpha$ -helical domains, two extracellular loops, a cytoplasmic loop and cytoplasmic N- and C-termini. Many of the key functional differences arise from specific amino-acid substitutions in the most highly conserved domains: the transmembrane and extracellular regions. Connexin 30.3, also known as GJB4 (gap junction  $\beta$ -4 protein), CX30.3 or EKV, is expressed in the epidermis (upper spinous and granular layers) and is believed to play a role in keratinocyte intercellular communication. Mutations in the gene encoding connexin 30.3 can result in erythrokeratoderma variabilis (EVK), a condition characterized by localized or generalized hyperkeratosis and random, transient erythematous patches.

## REFERENCES

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## CHROMOSOMAL LOCATION

Genetic locus: GJB4 (human) mapping to 1p34.3.

## SOURCE

connexin 30.3 (F6) is a mouse monoclonal antibody raised against recombinant connexin 30.3 of human origin.

## RESEARCH USE

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

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

connexin 30.3 (F6) is recommended for detection of connexin 30.3 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for connexin 30.3 siRNA (h): sc-72970, connexin 30.3 shRNA Plasmid (h): sc-72970-SH and connexin 30.3 shRNA (h) Lentiviral Particles: sc-72970-V.

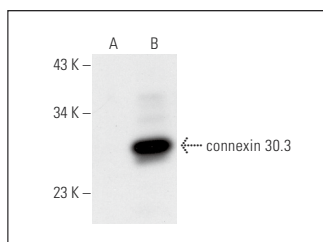
Molecular Weight of connexin 30.3: 30 kDa.

Positive Controls: connexin 30.3 (h): 293T Lysate: sc-113859, HeLa whole cell lysate: sc-2200 or C32 whole cell lysate: sc-2205.

## 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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

## DATA



connexin 30.3 (F6): sc-81802. Western blot analysis of connexin 30.3 expression in non-transfected: sc-117752 (A) and human connexin 30.3 transfected: sc-113859 (B) 293T 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](http://www.scbt.com) for detailed protocols and support products.