

Kazrin (Q-19): sc-243131

BACKGROUND

Kazrin, also known as KAZ, KAZN or KIAA1026, is a 775 amino acid protein that contains 3 SAM (sterile α motif) domains and belongs to the Kazrin family. Kazrin exists as five alternatively spliced isoforms, designated 1-5. Localizing to the cytoplasm, Kazrin isoforms 2, 3 and 4 are expressed in hair follicles, interfollicular epidermis, and various cell lines including keratinocytes. Kazrin co-localizes with desmoplakin and interacts with the N-terminus of periplakin (PPL). Kazrin is a component of the cornified envelope of keratinocytes and may play a role in desmosome assembly, cell adhesion, epidermal differentiation and cytoskeletal organization. Overexpression of Kazrin may lead to changes in cell shape, decrease levels of filamentous actin and impaired intercellular junction assembly. The gene encoding Kazrin maps to human chromosome 1p36.21 and mouse chromosome 4 E1.

REFERENCES

- Groot, K.R., Sevilla, L.M., Nishi, K., DiColandrea, T. and Watt, F.M. 2004. Kazrin, a novel periplakin-interacting protein associated with desmosomes and the keratinocyte plasma membrane. *J. Cell Biol.* 166: 653-659.
- Gallicano, G.I., Foshay, K., Pengetnze, Y. and Zhou, X. 2005. Dynamics and unexpected localization of the plakin binding protein, kazrin, in mouse eggs and early embryos. *Dev. Dyn.* 234: 201-214.
- Sevilla, L.M., Nachat, R., Groot, K.R. and Watt, F.M. 2008. Kazrin regulates keratinocyte cytoskeletal networks, intercellular junctions and differentiation. *J. Cell Sci.* 121: 3561-3569.
- Wang, Q., Liu, M., Li, X., Chen, L. and Tang, H. 2009. Kazrin F is involved in apoptosis and interacts with BAX and ARC. *Acta Biochim. Biophys. Sin.* 41: 763-772.
- Nachat, R., Cipolat, S., Sevilla, L.M., Chhatriwala, M., Groot, K.R. and Watt, F.M. 2009. KazrinE is a desmosome-associated liprin that colocalises with acetylated microtubules. *J. Cell Sci.* 122: 4035-4041.
- Cho, K., Lee, M., Gu, D., Munoz, W.A., Ji, H., Kloc, M. and McCrea, P.D. 2011. Kazrin, and its binding partners ARVCF- and δ -catenin, are required for *Xenopus laevis* craniofacial development. *Dev. Dyn.* 240: 2601-2612.

CHROMOSOMAL LOCATION

Genetic locus: KAZN (human) mapping to 1p36.21.

SOURCE

Kazrin (Q-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of Kazrin of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-243131 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

RESEARCH USE

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

APPLICATIONS

Kazrin (Q-19) is recommended for detection of Kazrin of 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Kazrin (Q-19) is also recommended for detection of Kazrin in additional species, including equine, bovine, porcine and avian.

Suitable for use as control antibody for Kazrin siRNA (h): sc-78617, Kazrin shRNA Plasmid (h): sc-78617-SH and Kazrin shRNA (h) Lentiviral Particles: sc-78617-V.

Molecular Weight of Kazrin: 47/37 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker[™] compatible donkey anti-goat IgG-HRP: sc-2033 (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 donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz[™] Mounting Medium: sc-24941.

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.