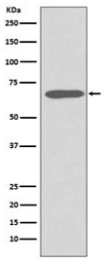
Keratin 1 Antibody GHO-11 / KRT1 Rabbit Monoclonal Antibody [clone GHO-11] (RQ5048)

Catalog No.	Formulation	Size
RQ5048	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

Availability	1-2 weeks
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	GHO-11
Purity	Affinity purified
UniProt	P04264
Applications	Western Blot : 1:5000-1:20000
Limitations	This Keratin 1 Antibody GHO-11 / KRT1 Rabbit Monoclonal Antibody is available for research use only.



Keratin 1 Antibody GHO-11 by WB in Human Skin. Western blot analysis of human skin tissue lysate using Keratin 1 Antibody GHO-11. A prominent immunoreactive band is observed at approximately 70 kDa, consistent with the predicted molecular weight of KRT1 (~67 kDa). The KRT1 Rabbit Monoclonal Antibody detects endogenous keratin 1 in human skin, supporting its use in studies of epidermal differentiation and intermediate filament expression.

Description

Keratin 1 Antibody GHO-11 recognizes keratin 1 (KRT1), a type II cytoskeletal intermediate filament protein expressed predominantly in differentiated keratinocytes of stratified squamous epithelia. Also known as cytokeratin 1 or CK1, this approximately 67 kDa protein is encoded by the KRT1 gene on chromosome 12q13.13. Keratin 1 contributes to the structural integrity of the epidermis by forming an extensive cytoplasmic filament network that protects epithelial cells

against mechanical stress. Its expression is closely associated with keratinocyte differentiation, making KRT1 an important marker of epidermal maturation and tissue organization.

During epidermal development and renewal, basal keratinocytes primarily express keratins 5 and 14, while cells entering the suprabasal compartment begin producing keratins 1 and 10. KRT1 forms heterodimers with the type I intermediate filament protein KRT10, and these complexes assemble into higher-order filament structures. The resulting cytoskeletal network helps maintain cell shape, mechanical resilience, and epithelial barrier integrity. Keratin 1 expression is particularly prominent in the spinous and granular layers of the epidermis, where keratinocytes undergo progressive differentiation before forming the cornified outer layer.

Mutations in KRT1 can disrupt intermediate filament assembly and cause inherited disorders of keratinization. These include epidermolytic ichthyosis, characterized by epidermal fragility, blistering, and hyperkeratosis, as well as certain forms of palmoplantar keratoderma. Altered KRT1 expression has also been investigated in psoriasis, wound healing, and other conditions involving abnormal epidermal differentiation. In epithelial tumor research, KRT1 can provide information about squamous differentiation, although its expression is not specific to malignant cells and should be interpreted alongside additional markers.

Western blot analysis of KRT1 typically identifies a protein migrating near its predicted molecular weight of approximately 67 kDa. NSJ Bioreagents offers clone GHO-11, a rabbit monoclonal antibody for investigating keratin 1 expression in human samples. This antibody complements immunohistochemistry-focused KRT1 reagents by providing an option for evaluating protein abundance in tissue lysates. A Keratin 1 Antibody GHO-11 is useful for studying epidermal differentiation, keratin filament organization, inherited skin disorders, and changes in epithelial protein expression.

Explore our Cytokeratin 1 Antibody LHK1 for investigating epidermal differentiation, keratin filament organization, and KRT1 expression in normal and diseased epithelial tissues.

Application Notes

Optimal dilution of the Keratin 1 Antibody GHO-11 / KRT1 Rabbit Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to human Cytokeratin 1 / KRT1 was used as the immunogen for the Keratin 1 Antibody GHO-11.

Storage

Store the Keratin 1 Antibody GHO-11 at -20oC.

Alternate Names

Cytokeratin 1 antibody, CK1 antibody, KRT1 antibody, Cytokeratin-1 antibody, Keratin Type II Cytoskeletal 1 antibody, Epidermal Keratin 1 antibody

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