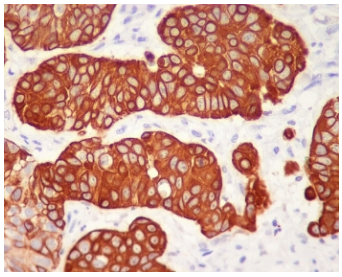
KRT5 Antibody AGD-11 / Cytokeratin 5 Rabbit Monoclonal Antibody [clone AGD-11] (RQ5410)

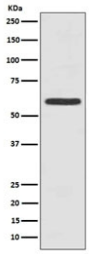
Catalog No.	Formulation	Size
RQ5410	Antibody in PBS with 0.02% sodium azide, 50% glycerol and 0.4-0.5mg/ml BSA	100 ul

Bulk quote request

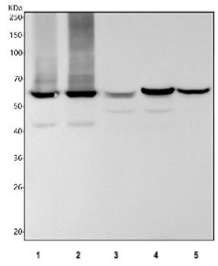
Availability	1-2 weeks
Species Reactivity	Human, Mouse, Rat
Format	Purified
Host	Rabbit
Clonality	Rabbit Monoclonal
Isotype	Rabbit IgG
Clone Name	AGD-11
Purity	Affinity purified
UniProt	P13647
Localization	Cytoplasmic
Applications	Western blot: 1:500-1:2000 Immunohistochemistry (FFPE): 1:50-1:200
Limitations	This KRT5 Antibody AGD-11 / Cytokeratin 5 Rabbit Monoclonal Antibody is available for research use only.



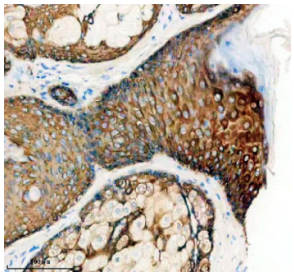
KRT5 Antibody AGD-11 by IHC in Human Urothelial Carcinoma. Immunohistochemistry of FFPE human urothelial carcinoma tissue using KRT5 Antibody AGD-11. Strong brown cytoplasmic staining is observed throughout clusters of tumor cells, with relatively little staining in the surrounding stromal tissue. The Cytokeratin 5 Rabbit Monoclonal Antibody highlights the epithelial tumor architecture, while nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using 10 mM citrate buffer, pH 6, for 10-20 minutes.



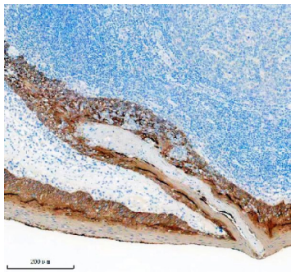
KRT5 Antibody AGD-11 by WB in Human A431 Cells. Western blot analysis of human A431 cell lysate using KRT5 Antibody AGD-11. A prominent immunoreactive band is observed at approximately 60 kDa, consistent with the predicted molecular weight of cytokeratin 5 (58-62 kDa). The Cytokeratin 5 Rabbit Monoclonal Antibody demonstrates recognition of a protein migrating at the expected molecular weight of KRT5, supporting its use for investigating basal epithelial keratin expression.



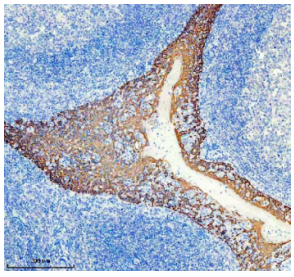
KRT5 Antibody AGD-11 by WB in Human, Rat, and Mouse Samples. Western blot analysis using KRT5 Antibody AGD-11 with lysates from human A431 cells (lane 1), human HaCaT cells (lane 2), rat skin (lane 3), mouse skin (lane 4), and mouse thymus (lane 5). A prominent band is detected at approximately 60-65 kDa in all five samples, consistent with the predicted molecular weight of KRT5 (58-62 kDa). Additional higher molecular weight signals are visible in lanes 1 and 2. The Cytokeratin 5 Rabbit Monoclonal Antibody demonstrates reactivity across human, rat, and mouse samples.



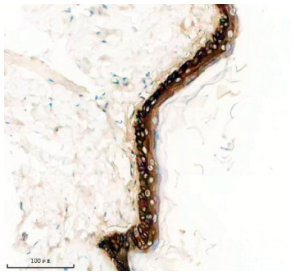
KRT5 Antibody AGD-11 by IHC in Human Skin. Immunohistochemistry of FFPE human skin tissue using KRT5 Antibody AGD-11. Brown DAB staining is observed in epithelial cells surrounding hair follicle structures, with particularly prominent staining in the outer epithelial layers. The Cytokeratin 5 Rabbit Monoclonal Antibody highlights keratinocyte populations associated with epidermal appendages, while the surrounding connective tissue exhibits comparatively weak staining. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using EDTA buffer, pH 8, for 20 minutes.



KRT5 Antibody AGD-11 by IHC in Human Tonsil. Immunohistochemistry of FFPE human tonsil tissue using KRT5 Antibody AGD-11. Strong brown cytoplasmic staining is observed in the stratified squamous epithelium, contrasting with the predominantly unstained lymphoid tissue. The Cytokeratin 5 Rabbit Monoclonal Antibody highlights epithelial layers and their underlying architecture, while nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using EDTA buffer, pH 8, for 20 minutes.



KRT5 Antibody AGD-11 by IHC in Human Tonsil, Second View. Immunohistochemistry of FFPE human tonsil tissue using KRT5 Antibody AGD-11. Brown DAB staining highlights the squamous epithelial lining of a tonsillar crypt, with prominent staining in basal and suprabasal epithelial cells. The surrounding lymphoid tissue exhibits little staining, providing contrast with the epithelial compartment. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using EDTA buffer, pH 8, for 20 minutes.



KRT5 Antibody AGD-11 by IHC in Rat Skin. Immunohistochemistry of FFPE rat skin tissue using KRT5 Antibody AGD-11. Strong brown cytoplasmic staining is concentrated in the epithelial cells lining a hair follicle, with comparatively little staining in the surrounding connective tissue. The Cytokeratin 5 Rabbit Monoclonal Antibody demonstrates reactivity with rat KRT5 in follicular epithelial structures. Nuclei are counterstained blue with hematoxylin. Heat-induced epitope retrieval was performed using EDTA buffer, pH 8, for 20 minutes.

Description

KRT5 Antibody AGD-11 recognizes keratin 5 (KRT5), a type II intermediate filament protein expressed predominantly in the basal cells of stratified and pseudostratified epithelia. Also known as cytokeratin 5 or CK5, this approximately 58 kDa protein contributes to the mechanical stability of epithelial tissues by forming a cytoplasmic filament network. KRT5 is particularly abundant in basal keratinocytes of the epidermis and in basal epithelial populations of the prostate, mammary gland, and respiratory tract. Its expression is frequently used to identify basal epithelial compartments and investigate cellular differentiation.

KRT5 forms heterodimers with keratin 14 (KRT14), a type I intermediate filament protein that is expressed in many of the same epithelial cells. These complexes assemble into intermediate filaments that maintain cellular architecture and help epithelial cells resist mechanical stress. During epidermal differentiation, basal keratinocytes expressing KRT5 and KRT14 give rise to suprabasal cells that increasingly express keratins 1 and 10. Changes in these expression patterns provide information about epithelial maturation, tissue renewal, and responses to injury. KRT5 is therefore studied in developmental biology, epithelial stem cell research, and wound healing.

In tumor pathology, KRT5 is associated with squamous differentiation and basal-like epithelial phenotypes. It is frequently expressed in squamous cell carcinomas arising in the lung, cervix, and head and neck. KRT5 is commonly evaluated alongside KRT6 and p63 when investigating squamous differentiation. In breast cancer, KRT5 expression is associated with subsets of basal-like tumors, although additional markers are required for molecular classification. In prostate tissue, KRT5 staining identifies basal epithelial cells surrounding benign glands, while conventional prostatic adenocarcinoma typically lacks a basal cell layer. These distinctions make KRT5 useful for examining epithelial organization and tumor differentiation.

Pathogenic variants in KRT5 can cause epidermolysis bullosa simplex, an inherited disorder characterized by skin fragility and blister formation. KRT5 is also investigated in epithelial regeneration and tissue remodeling. NSJ Bioreagents offers rabbit monoclonal clone AGD-11, developed against a C-terminal region of human KRT5. The antibody provides an additional clone option for investigating KRT5 expression and complements other antibodies directed against different regions of the protein. A KRT5 Antibody AGD-11 supports research into basal epithelial differentiation, intermediate filament organization, and epithelial tumor biology.

Explore our protein microarray-validated Cytokeratin 5 Antibody KRT5/3594 for investigating basal epithelial differentiation, squamous cell carcinomas, and keratin filament organization.

Application Notes

Optimal dilution of the KRT5 Antibody AGD-11 / Cytokeratin 5 Rabbit Monoclonal Antibody should be determined by the researcher.

Immunogen

A synthetic peptide specific to the C-terminal region of human Cytokeratin 5 / KRT5 was used as the immunogen for the KRT5 antibody.

Storage

Store the KRT5 antibody at -20oC.

Alternate Names

Cytokeratin 5 antibody, CK5 antibody, Keratin 5 antibody, CK-5 antibody, Type II Cytoskeletal Keratin 5 antibody, Basal Cell Keratin antibody

Copyright © NSJ Bioreagents. All rights reserved.