

Basic Information

Product Name	Anti-DSG2 Antibody	
Gene Name	DSG2	
Source	Rabbit	
Clonality	Polyclonal	
Isotype	IgG	
Species Reactivity	human	
Tested Application	WB, IHC, FCM, ICC/IF, ELISA	
Contents	500 ug/ml antibody with PBS, 0.02% NaN ₃ , 1 mg/ml BSA and 50% glycerol.	
Immunogen	E.coli-derived human Desmoglein 2/DSG2 recombinant protein (Position: L24-E1020).	
Concentration	500 ug/ml	
Purification	Immunogen affinity purified.	
Observed MW	160 kDa	
Dilution Ratios	Western blot (WB): 1:500-2000 Immunohistochemistry (IHC): 1:50-400 Immunocytochemistry/Immunofluorescence (ICC/IF): 1:50-400 Flow Cytometry (Fixed): 1:50-200 Enzyme linked immunosorbent assay (ELISA): 1:100-1000 (Boiling the paraffin sections in 10mM citrate buffer, pH6.0, or PH8.0 EDTA repair liquid for 20 mins is required for the staining of formalin/paraffin sections.) Optimal working dilutions must be determined by end user.	

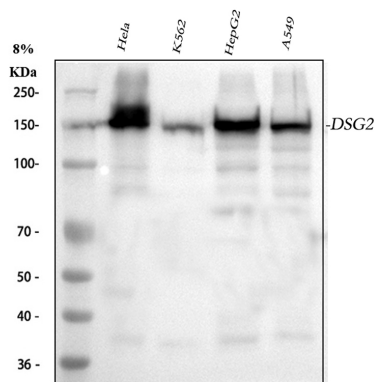
Storage

12 months from date of receipt, -20°C as supplied.

Background Information

Desmoglein-2 is a protein that in humans is encoded by the DSG2 gene. These desmoglein gene family members are located in a cluster on chromosome 18. This second family member is expressed in colon, colon carcinoma, and other simple and stratified epithelial-derived cell lines. Mutations in DSG2 display a high degree of penetrance. Disease expression was of variable severity with LV involvement a prominent feature. The low prevalence of classical ECG changes highlights the need to expand current diagnostic criteria to take account of LV disease, childhood disease expression, and incomplete penetrance.

Selected Validation Data



Western blot analysis of DSG2 using anti-DSG2 antibody (A02035). The sample well of each lane was loaded with 30 ug of sample under reducing conditions.

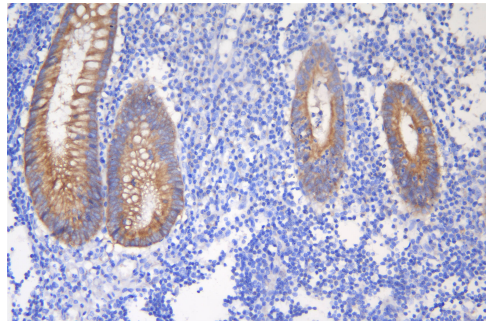
Lane 1: human HeLa whole cell lysates,

Lane 2: human K562 whole cell lysates,

Lane 3: human HepG2 whole cell lysates,

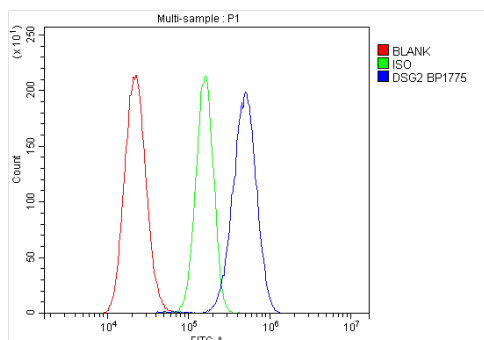
Lane 4: human A549 whole cell lysates.

After electrophoresis, proteins were transferred to a membrane. Then the membrane was incubated with rabbit anti-DSG2 antigen affinity purified polyclonal antibody (A02035) at a dilution of 1:1000 and probed with a goat anti-rabbit IgG-HRP secondary antibody (Catalog # BA1054). The signal is developed using ECL Plus Western Blotting Substrate (Catalog # AR1197). A specific band was detected for DSG2 at approximately 160 kDa. The expected band size for DSG2 is at 122 kDa.



IHC analysis of DSG2 using anti-DSG2 antibody (A02035).

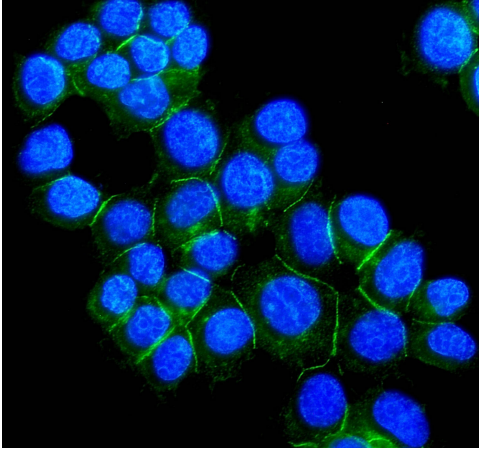
DSG2 was detected in a paraffin-embedded section of human appendicitis tissue. Biotinylated goat anti-rabbit IgG was used as secondary antibody. The tissue section was incubated with rabbit anti-DSG2 Antibody (A02035) at a dilution of 1:200 and developed using Streptavidin-Biotin-Complex (SABC) (Catalog # SA1022) with DAB (Catalog # AR1027) as the chromogen.



Flow Cytometry analysis of RH-35 cells using anti-DSG2 antibody (A02035).

Overlay histogram showing RH-35 cells stained with A02035 (Blue line).

To facilitate intracellular staining, cells were fixed with 4% paraformaldehyde and permeabilized with permeabilization buffer. The cells were blocked with 10% normal goat serum. And then incubated with rabbit anti-DSG2 Antibody (A02035) at 1:100 dilution for 30 min at 20°C. DyLight®488 conjugated goat anti-rabbit IgG (BA1127) was used as secondary antibody at 1:100 dilution for 30 minutes at 20°C. Isotype control antibody (Green line) was rabbit IgG at 1:100 dilution used under the same conditions. Unlabelled sample without incubation with primary antibody and secondary antibody (Red line) was used as a blank control.



IF analysis of DSG2 using anti-DSG2 antibody (A02035).

DSG2 was detected in an immunocytochemical section of MCF-7 cells. The section was incubated with rabbit anti-DSG2 Antibody (A02035) at a dilution of 1:100. DyLight®488 Conjugated Goat Anti-Rabbit IgG (Green) (Catalog # BA1127) was used as secondary antibody. The section was counterstained with DAPI (Catalog # AR1176) (Blue).