Product datasheet

Anti-Desmoglein 2/DSG2 antibody [6D8] ab14415

Overview

Product name       Anti-Desmoglein 2/DSG2 antibody [6D8]
Description        Mouse monoclonal [6D8] to Desmoglein 2/DSG2
Host species       Mouse
Specificity        This antibody does not cross-react with Desmoglein 1 or Desmoglein 3. The epitope is within the extracellular domain of Desmoglein 2/DSG2. The clone number has been updated from (3G132) to (6D8) both clone numbers name the same antibody clone.

Tested applications Suitable for: IP, WB, ICC/IF, IHC-P
Species reactivity  Reacts with: Human
Immunogen          Full length native protein (purified) corresponding to Human Desmoglein 2/DSG2.
General notes      For maximum recovery of product, centrifuge the original vial after thawing and prior to removing the cap. Further dilutions can be made in assay buffer.

This product was previously labelled as Desmoglein 2

Properties

Form              Liquid
Storage instructions Shipped at 4°C. Add glycerol to a final volume of 50% for extra stability and aliquot. Store at -80°C. Avoid freeze / thaw cycle.
Storage buffer     pH: 7.20
                     Preservative: 0.1% Sodium azide
                     Constituent: PBS
Purity             Ascites
Purification notes Purified from ascites.
Clonality          Monoclonal
Clone number       6D8
Isotype            IgG1
Applications

Our Abpromise guarantee covers the use of ab14415 in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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Application notes

IF: Use at a concentration of 20 - 50 µg/ml. IHC-P: Used at a dilution of 1/10 for 30 min on human bladder cancer (see Abreview). IP: Use at a concentration of 5 - 10 µg/ml. WB: Use at a concentration of 1 - 3 µg/ml. Detects a band of approximately 165 kDa (predicted molecular weight: 122 kDa).

Not tested in other applications.
Optimal dilutions/concentrations should be determined by the end user.

Target

Function

Component of intercellular desmosome junctions. Involved in the interaction of plaque proteins and intermediate filaments mediating cell-cell adhesion.

Tissue specificity

All of the tissues tested and carcinomas.

Involvement in disease

Defects in DSG2 are the cause of familial arrhythmogenic right ventricular dysplasia type 10 (ARVD10) [MIM:610193]; also known as arrhythmogenic right ventricular cardiomyopathy 10 (ARVC10). ARVD is an autosomal dominant disease characterized by partial degeneration of the myocardium of the right ventricle, electrical instability, and sudden death. It is clinically defined by electrocardiographic and angiographic criteria; pathologic findings, replacement of ventricular myocardium with fatty and fibrous elements, preferentially involve the right ventricular free wall. Genetic variations in DSG2 are the cause of susceptibility to cardiomyopathy dilated type 1BB (CMD1BB) [MIM:612877]. A disorder characterized by ventricular dilation and impaired systolic function, resulting in congestive heart failure and arrhythmia. Patients are at risk of premature death.

Sequence similarities

Contains 4 cadherin domains.

Domain

Calcium may be bound by the cadherin-like repeats.

Cellular localization

Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) - Anti-Desmoglein 2/DSG2 antibody [6D8] (ab14415)

This image is courtesy of an Abreview submitted by Dr Rudolf Jung

ab14415 at a 1/10 dilution staining human urothelium (bladder cancer) by Immunohistochemistry (Formalin-fixed paraffin-embedded sections). The antibody was incubated with the tissue for 30 minutes following heat mediated antigen retrieval and paraformaldehyde fixation.

Western blot - Anti-Desmoglein 2/DSG2 antibody [6D8] (ab14415)

All lanes: Anti-Desmoglein 2/DSG2 antibody [6D8] (ab14415) at 3 µg/ml

Lane 1: U2OS (Hu) whole cell lysate
Lane 2: 293T (Hu) whole cell lysate
Lane 3: Cos-7 (AGMk) whole cell lysate
Lane 4: CHO (Hm) whole cell lysate
Lane 5: PC12 (Rat) whole cell lysate
Lane 6: 3T3 (Ms) whole cell lysate

Lysates/proteins at 30 µg per lane.

Secondary

All lanes: HRP conjugated goat anti-mouse antibody

Developed using the ECL technique.

Performed under reducing conditions.

Predicted band size: 122 kDa
Observed band size: 125 kDa

why is the actual band size different from the predicted?

Additional bands at: 100 kDa. We are unsure as to the identity of these extra bands.

Exposure time: 3 minutes
The blot was blocked with 5% milk for 1 hour at 21°C and incubated with the primary antibody for 12 hours at 4°C.

The antibody detects a species of the predicted mobility (125 kDa) in Human cell lines U2OS (1) and 293T (2). No signal was observed in extracts from other species, suggesting that this antibody does not cross-react with AGMk, Hm, Ms or Rat.

Please note: All products are “FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES”

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