

Human DSC2 / Desmocollin-2 Protein (His Tag)

Catalog Number: 10809-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

ARVD11; CDHF2; DG2; DGII/III; DSC3; AW228162; Dsc2a; Dsc2b

Protein Construction:

A DNA sequence encoding the extracellular domain (Met 1-Arg 684) of human DSC2 (Q02487-1) was expressed, with a C-terminal polyhistidine tag.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 75 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ala 28 & Arg 136

Molecular Mass:

The secreted recombinant human DSC2 (pro form) consists of 668 amino acids and predicts a molecular mass of 75 kDa. As a result of glycosylation, the apparent molecular mass of rhDSC2 is approximately 85 and 100 kDa in SDS-PAGE under reducing conditions, corresponding to the mature and pro form respectively.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

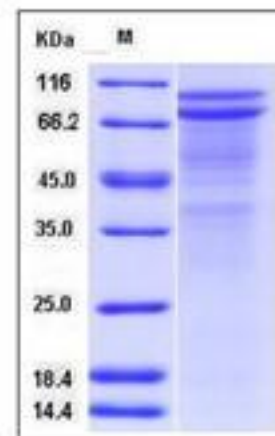
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

DSC2 is a calcium-dependent glycoprotein that is a member of the desmocollin subfamily of the cadherin superfamily. Like other desmocollins, murine DSC2 has two products, Dsc2a and Dsc2b, produced by alternative splicing of a 46 bp exon which encodes 11 COOH-terminal aa followed by an in-frame stop codon. These desmosomal family members, along with the desmogleins, are found primarily in epithelial cells where they constitute the adhesive proteins of the desmosome cell-cell junction and are required for cell adhesion and desmosome formation. The desmosomal family members are arranged in two clusters on chromosome 18, occupying less than 650 kb combined. Mutations in DSC2 are associated with arrhythmogenic right ventricular dysplasia-11. DSC2 is involved in the interaction of plaque proteins and intermediate filaments mediating cell-cell adhesion. DSC2 may contribute to epidermal cell positioning by mediating differential adhesiveness between cells that express different isoforms.

References

1. Nuber UA, *et al.* (1995) The widespread human desmocollin Dsc2 and tissue-specific patterns of synthesis of various desmocollin subtypes. *Eur J Cell Biol.* 66 (1): 69-74.
2. Marsden MD, *et al.* (1997) Cloning and transcriptional analysis of the promoter of the human type 2 desmocollin gene (DSC2). *Gene.* 186 (2): 237-47.
3. Greenwood MD, *et al.* (1997) Exon-intron organization of the human type 2 desmocollin gene (DSC2): desmocollin gene structure is closer to "classical" cadherins than to desmogleins. *Genomics.* 44 (3): 330-5.

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