# abcam

## Product datasheet

## Recombinant Human GJB2 protein ab152424

## 1 Image

**Description** 

Product name Recombinant Human GJB2 protein

Expression system Wheat germ
Accession P29033

Protein length Full length protein

Animal free No

Nature Recombinant

**Species** Human

**Sequence** MDWGTLQTILGGVNKHSTSIGKIWLTVLFIFRIMILVVAAKEV

WGDEQAD

FVCNTLQPGCKNVCYDHYFPISHIRLWALQLIFVSTPALLV

AMHVAYRRH

EKKRKFIKGEIKSEFKDIEEIKTQKVRIEGSLWWTYTSSIFFR

VIFEAAF

MYVFYVMYDGFSMQRLVKCNAWPCPNTVDCFVSRPTEK

TVFTVFMIAVSG ICILLNVTELCYLLIRYCSGKSKKPV

Predicted molecular weight 51 kDa including tags

Amino acids 1 to 226

## **Specifications**

Our <u>Abpromise guarantee</u> covers the use of ab152424 in the following tested applications.

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

**Applications** ELISA

SDS-PAGE

Western blot

Form Liquid

**Additional notes** 

#### **Preparation and Storage**

#### Stability and Storage

Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles.

00.8:Hq

Constituents: 0.31% Glutathione, 0.79% Tris HCI

#### General Info

#### **Function**

#### Involvement in disease

One gap junction consists of a cluster of closely packed pairs of transmembrane channels, the connexons, through which materials of low MW diffuse from one cell to a neighboring cell.

Defects in GJB2 are the cause of deafness autosomal recessive type 1A (DFNB1A) [MIM:220290]. DFNB1A is a form of sensorineural hearing loss. Sensorineural deafness results from damage to the neural receptors of the inner ear, the nerve pathways to the brain, or the area of the brain that receives sound information.

Defects in GJB2 are the cause of deafness autosomal dominant type 3A (DFNA3A) [MIM:601544].

Defects in GJB2 are a cause of Vohwinkel syndrome (VS) [MIM:124500]. VS is an autosomal dominant disease characterized by hyperkeratosis, constriction on finger and toes and congenital deafness.

Defects in GJB2 are a cause of palmoplantar keratoderma with deafness (PPKDFN) [MIM:148350]. PPKDFN is an autosomal dominant disorder characterized by the association of palmoplantar hyperkeratosis with progressive, bilateral, high-frequency, sensorineural deafness. Defects in GJB2 are a cause of keratitis-ichthyosis-deafness syndrome (KID syndrome) [MIM:148210]; an autosomal dominant form of ectodermal dysplasia. Ectodermal dysplasias (EDs) constitute a heterogeneous group of developmental disorders affecting tissues of ectodermal origin. EDs are characterized by abnormal development of two or more ectodermal structures such as hair, teeth, nails and sweat glands, with or without any additional clinical sign. Each combination of clinical features represents a different type of ectodermal dysplasia. KID syndrome is characterized by the association of hyperkeratotic skin lesions with vascularizing keratitis and profound sensorineural hearing loss. Clinical features include deafness, ichthyosis, photobia, absent or decreased eyebrows, sparse or absent scalp hair, decreased sweating and dysplastic finger and toenails.

Defects in GJB2 are the cause of Bart-Pumphrey syndrome (BPS) [MIM:149200]. BPS is an autosomal dominant disorder characterized by sensorineural hearing loss, palmoplantar keratoderma, knuckle pads, and leukonychia, It shows considerable phenotypic variability. Defects in GJB2 are the cause of ichthyosis hystrix-like with deafness syndrome (HID syndrome) [MIM:602540]. HID syndrome is an autosomal-dominant inherited keratinizing disorder characterized by sensorineural deafness and spiky hyperkeratosis affecting the entire skin. HID syndrome is considered to differ from the similar KID syndrome in the extent and time of occurrence of skin symptoms and the severity of the associated keratitis.

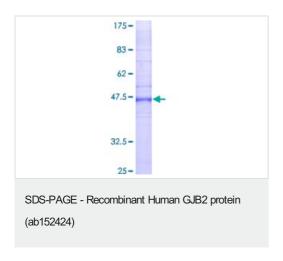
#### Sequence similarities

#### **Cellular localization**

Belongs to the connexin family. Beta-type (group I) subfamily.

Cell membrane. Cell junction > gap junction.

#### **Images**



12.5% SDS-PAGE analysis of ab152424 stained with Coomassie Blue.

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- · Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- · We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

## Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors