GJA1 Protein, Bovine (Cell-Free, His)

Cat. No.:	HY-P702286
Synonyms:	Gap junction alpha-1 protein; Connexin-43; Cx43; Vascular smooth muscle connexin-43
Species:	Bovine
Source:	E. coli Cell-free
Accession:	P18246 (G2-I383)
Gene ID:	281193
Molecular Weight:	44.6 kDa

PROPERTIES

AA Sequence	G D W S A L G K L L D K V Q A Y S T A G G K V W L S V L F I F R I L L L G T A V E S A W G D E Q S A F R C N T Q Q P G C E N V C Y D K S F P I S H V R F W V L Q I I F V S V P T L L Y L A H V F Y V M R K E E K L N K K E E E L K V V A Q T D G A N V D M H L K Q I E I K K F K Y G I E E H G K V K M R G G L L R T Y I I S I L F K S V F E V A F L L I Q W Y I Y G F S L S A V Y T C K R D P C P H Q V D C F L S R P T E K T I F I I F M L V V S L V S L A L N I I E L F Y V F F K G V K D R V K G K S D P Y H T T T G P L S P S K D C G S P K Y A Y F N G C S S P T A P L S P M S P P G Y K L V T G D R N N S S C R N Y N K Q A S E Q N W A N Y S A E Q N R M G Q A G S T I S N S H A Q P F D F P D D H Q N S K K L D A G H E L Q P L A I V D Q R P S S R A S S R A S S R P R P D D L E I
Appearance	Lyophilized powder.
Formulation	Lyophilized from a 0.22 μm filtered solution of Tris/PBS-based buffer, 6% Trehalose, pH 8.0.
Endotoxin Level	<1 EU/μg, determined by LAL method.
Reconsititution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH_2O. For long term storage it is recommended to add 5-50% of glycerol (final concentration). Our default final concentration of glycerol is 50%. Customers could use it as reference.
Storage & Stability	Stored at -20°C for 2 years. After reconstitution, it is stable at 4°C for 1 week or -20°C for longer (with carrier protein). It is recommended to freeze aliquots at -20°C or -80°C for extended storage.
Shipping	Room temperature in continental US; may vary elsewhere.

DESCRIPTION

Background	Gap junction protein GJA1 serves as a crucial regulator of bladder capacity. Forming a gap junction, GJA1 facilitates the

exchange of low molecular weight materials between adjacent cells through connexons, contributing to the regulation of bladder function. In addition to its role in bladder physiology, GJA1 plays a potential key function in hearing by participating in the recycling of potassium to the cochlear endolymph. Acting as a negative regulator of bladder functional capacity, GJA1 enhances intercellular electrical and chemical transmission, heightening sensitivity to cholinergic neural stimuli and inducing contraction in bladder muscles. Moreover, GJA1 may influence cell growth inhibition by regulating the expression and localization of NOV. It is indispensable for gap junction communication in the ventricles and forms connexons composed of hexamers of connexins. The protein interacts with various partners, including SGSM3, RIC1/CIP150, CNST, CSNK1D, TJP1, SRC, UBQLN4, NOV, and TMEM65, contributing to its diverse cellular functions.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA