

Beta-glucuronidase/GUSB Protein, E.coli (N-His,Solution)

Cat. No.:	HY-P70258
Synonyms:	rE.coBeta-glucuronidase/GUSB, His; Beta-glucuronidase; uidA; GUS
Species:	E.coli
Source:	E. coli
Accession:	P05804 (M1-Q603)
Gene ID:	946149
Molecular Weight:	69-78 kDa

PROPERTIES

AA Sequence

```

MLR P V E T P T R   E I K K L D G L W A   F S L D R E N C G I   D Q R W W E S A L Q
E S R A I A V P G S   F N D Q F A D A D I   R N Y A G N V W Y Q   R E V F I P K G W A
G Q R I V L R F D A   V T H Y G K V W V N   N Q E V M E H Q G G   Y T P F E A D V T P
Y V I A G K S V R I   T V C V N N E L N W   Q T I P P G M V I T   D E N G K K K Q S Y
F H D F F N Y A G I   H R S V M L Y T T P   N T W V D D I T V V   T H V A Q D C N H A
S V D W Q V V A N G   D V S V E L R D A D   Q Q V V A T G Q G T   S G T L Q V V N P H
L W Q P G E G Y L Y   E L C V T A K S Q T   E C D I Y P L R V G   I R S V A V K G E Q
F L I N H K P F Y F   T G F G R H E D A D   L R G K G F D N V L   M V H D H A L M D W
I G A N S Y R T S H   Y P Y A E E M L D W   A D E H G I V V I D   E T A A V G F N L S
L G I G F E A G N K   P K E L Y S E E A V   N G E T Q Q A H L Q   A I K E L I A R D K
N H P S V M W S I   A N E P D T R P Q G   A R E Y F A P L A E   A T R K L D P T R P
I T C V N V M F C D   A H T D T I S D L F   D V L C L N R Y Y G   W Y V Q S G D L E T
A E K V L E K E L L   A W Q E K L H Q P I   I I T E Y G V D T L   A G L H S M Y T D M
W S E E Y Q C A W L   D M Y H R V F D R V   S A V V G E Q V W N   F A D F A T S Q G I
L R V G G N K K G I   F T R D R K P K S A   A F L L Q K R W T G   M N F G E K P Q Q G
G K Q

```

Biological Activity Measured by its ability to hydrolyze Phenolphthalein Glucuronide. The specific activity is 1029.5 pmol/min/μg.

Appearance Solution.

Formulation Supplied as a 0.2 μm filtered solution of PBS, pH 7.4.

Endotoxin Level <1 EU/μg, determined by LAL method.

Reconstitution N/A

Storage & Stability Stored at -80°C for 1 year. It is stable at -20°C for 3 months after opening. It is recommended to freeze aliquots at -80°C for extended storage. Avoid repeated freeze-thaw cycles.

Shipping Shipping with dry ice

DESCRIPTION

Background

Beta-glucuronidase/GUSB protein exhibits beta-glucuronidase activity, demonstrated with the artificial substrate p-nitrophenyl-beta-D-glucuronide (PNPG) and 4-methylumbelliferyl-glucuronide. This enzymatic capability suggests that GUSB is likely adept at scavenging glucuronate from a variety of chemically distinct xenobiotic and endobiotic glucuronides present in the gastrointestinal (GI) tract, thus utilizing diverse sources of carbon. As a constituent of the GI microbiome, GUSB plays a crucial role in the reactivation of glucuronide drug conjugates. However, the reactivated compounds can pose a significant threat to the GI tract, emphasizing the potential impact of GUSB in drug metabolism and the intricate interplay between microbial enzymes and host physiology in the gastrointestinal environment.

Caution: Product has not been fully validated for medical applications. For research use only.

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