

## 32-6791: GUSB Human

**Application :** Functional Assay

**Alternative Name :** GUSB, BG, MPS7, Glucuronidase Beta, EC 3.2.1.31, Beta-G1, Beta-D-Glucuronidase, Glucuronidase, Beta, Beta-Glucuronidasem.

### Description

Source: Sf9, Baculovirus cells.

Sterile Filtered colorless solution.

Glucuronidase Beta (GUSB) is a lysosomal hydrolase which is taking part in the stepwise degradation of glucuronic acid-containing glycosaminoglycans and plays a significant role in the degradation of dermatan and keratin sulfates. GUSB is comprised of heparin sulfate, chondroitin sulfate and hyaluronan.

GUSB Human Recombinant produced in Sf9 Baculovirus cells is a single, glycosylated polypeptide chain containing 635 amino acids (23-651a.a) and having a molecular mass of 73.4kDa (Molecular size on SDS-PAGE will appear at approximately 70-100kDa). GUSB is fused to a 6 amino acid His-tag at C-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 1 µg / 5 µg

**Purification :** Greater than 90.0% as determined by SDS-PAGE.

**Content :** GUSB protein solution (0.25mg/ml) containing Phosphate Buffered Saline (pH 7.4) and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** LQGGMLYPQE SPSRECKELD GLWSFRADFS DNRRRGFEEQ WYRRPLWESG PTVDMVPVSS  
FNDISQDWRL RHFGVWVWYE REVILPERWT QDLRTRVVL RIGSAHSYAIV WVNGVDTLEH EGGYLPFEAD  
ISNLVQVGPL PSRLRITIAI NNTLTPTTLP PGTIQYLTDT SKYPKGYFVQ NTYFDFFNIA GLQRSVLLYT  
TPTTYIDDIT VTTSVEQDSG LVNYQISVKG SNLFKLEVRL LDAENKVVAN GTGTQGQLKV PGVSLWWPYL  
MHERPAYLYS LEVQLTAQTS LGPVSDFYTL PVGIRTVAVT KSQFLINGKP FYFHGVNKHE DADIRGKGFD  
WPLLKDFNL LRWLGANAFR TSHYPYAEV MQMCDRYGIV VIDECPGVGL ALPQFFNNVS  
LHHMQVMEE VVRRDKNHPA VVMWSVANEP ASHLESAGYY LKMVIAHTKS LDPSRPVTFV  
SNSNYAADKG APYVDVICLN SYYSWYHDYG HLELIQLQLA TQFENWYKKY QKPIIYSEYG AETIAGFHQD  
PPLMFTEEQ KSLLEQYHLG LDQKRRKYVV GELIWNFADF MTEQSPTRVL GNKKGIFTRQ RQPKSAAFL  
RERYWKIANE TRYPHSVAKS QCLENSLFTH HHHHH.

### Application Note

Specific activity is > 1600 pmol/min/ug and is defined as the amount of enzyme that hydrolyze 1.0 pmole of 4-Methylumbelliferone to 4-Methylumbelliferyl-Beta-D-glucosiduronic acid per minute at 37C and pH6.0.