

Sucrase isomaltase/SI Protein, Human (Cell-Free, His)

Cat. No.:	HY-P702459
Synonyms:	Sucrase-isomaltase, intestinal
Species:	Human
Source:	E. coli Cell-free
Accession:	P14410 (M2-R1007)
Gene ID:	6476
Molecular Weight:	115.2 kDa

PROPERTIES

AA Sequence

```

MARKKFSGLE   ISLIVL FVIV   TIIAIALIVV   LATKTPAVDE
ISDSTSTPAT   TRVTTNPSDS   GKCPNVLNDP   VNV RINCIPE
QFPTEGICAQ   RGC CWRPWND   SLIPWCF FVD   NHGYNVQDMT
TTSIGVEAKL   NRIPSP TLF G   NDINSVL FTT   QNQTPNRFRF
KITDPNNRRY   EVPHQYVKEF   TGPTVSD TLY   DVKVAQNPFS
IQVIRKSN GK   TLF DTSIGPL   VYSDQYLQIS   TRLPSDYIYG
IGE QVHKRFR   HDLSWK TWP I   FTRDQLPGDN   NNNLYGHQTF
FMCIEDTSGK   SFGVFLMNSN   AMEIFIQPTP   IVTYRVTGGI
LDFYILLGDT   PEQVVQQYQQ   LVGLPAMPAY   WNLGFQLSRW
NYKSLDVVKE   VVRRNREAGI   PFDTQVTDID   YMEDKKDFTY
DQVAFNGLPQ   FVQDLHDHGQ   KYV IILDPAI   SIGRRANGTT
YATYER GNTQ   HVWINE SDGS   TPIIGEVWPG   LTVY P DFTNP
NCIDWWANEC   SIFHQEVQYD   GLWIDMNEVS   SFIQGSTKGC
NVNKLNYPPF   TPDILDKL MY   SKTICMDAVQ   NWGKQYDVHS
LYGYSMAIAT   EQAVQKVFPN   KRSFILTRST   FAGSGRHAAH
WLGDN T ASWE   QMEWSITGML   EFSLFGIPLV   GADICGFVAE
TTEELCRRWM   QLGAFY PFSR   NHNSDGYEHQ   DPAFFGQNSL
LVKSSRQYLT   IRYTLLPFLY   TLFYKAHVFG   ETVARPVLHE
FYEDTNSWIE   DTEFLWGPAL   LITPVLKQGA   DTVSAYIPDA
IWYDYESGAK   RPWRKQRVDM   YLPADKIGLH   LRGGYI IPIQ
EPDVTTTASR   KNPLGLIVAL   GENNTAKGDF   FWDDGETKDT
IQNGNYILYT   FSVSNNTLDI   VCTHSSYQEG   TTLAFQTVKI
LGLTDSVTEV   RVAENNQPMN   AHSNFTYDAS   NQVLLIADLK
LNLGRNFSVQ   WNQIFSENER   FNCYPDADLA   TEQKCTQRGC
VWRTGSSLSK   APECYFPRQD   NSYSVNSARY   SSMGITADLQ
LNTANAR

```

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.
Reconstitution	It is not recommended to reconstitute to a concentration less than 100 μg/mL in ddH ₂ O. 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

Sucrase isomaltase (SI) protein assumes a crucial role in the concluding phase of carbohydrate digestion, marking the final stage in the breakdown of complex carbohydrates into absorbable forms. Specifically, the isomaltase activity of SI is characterized by its specificity for both alpha-1,4- and alpha-1,6-oligosaccharides, highlighting its ability to cleave bonds in these specific types of carbohydrates. This enzymatic specificity underscores the significance of SI in the efficient hydrolysis of complex oligosaccharides, contributing to the production of simpler sugars that can be readily absorbed and utilized by the body. SI's role in carbohydrate digestion emphasizes its importance in dietary nutrient absorption and metabolic processes, aligning with its central function in facilitating the breakdown of complex carbohydrates into more readily digestible forms.

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