BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno-Řečkovice a Mokrá Hora

Date of issue: 24.08.2018

PRODUCT DATASHEET

Xylosyltransferase 2 Human HEK293

Cat. No.: RD172125100
Type: Recombinant protein
Size: 0.1 mg
Source: HEK293
Species: Human

Description

Total 839 AA. MW: 94.0 kDa (calculated). UniProtKB acc. No. Q9H1B5 (Gly37-Arg865, lumenal domain, isoform 1, natural variant with Thr305). N-terminal linker (2 extra AA), C-terminal linker (2 extra AA) and C-terminal His-tag (6 extra AA). Protein identity confirmed by LC-MS/MS.

Other names

Peptide O-xylosyltransferase 1, Xylosyltransferase II, XT-II, XylT-II, UDP-D-xylose:proteoglycan core protein beta-D-xylosyltransferase

Introduction to the molecule

Xylosyltransferases (XTs) are ubiquitously expressed enzymes that belong to the group of glycosyltransfe-rases. These enzymes initiate the proteoglycans formation by assembly of glycosaminoglycan (GAG) chains to the protein substrate by catalysing the transfer of xylose from the nucleoside diphosphate donor (UDP-xylose) to serine residues in the protein [1, 2]. XTs reside in the endoplasmatic reticulum and/or cis-Golgi, but they are also released into extracellular matrix [3]. The XTs serum activity has been proposed as biomarker of altered proteoglycan metabolism in various diseases, eg. diabetes, systematic sclerosis, liver neoplasia and HTLV-1 retrovirus adhesion [4].

Amino Acid sequence

ASGLEEDEAG EKGRQRKPRP LDPGEGSKDT DSSAGRRGST GRRHGRWRGR AESPGVPVAK VVRAVTSRQR ASRRVPPAPP PEAPGRQNLS GAAAGEALVG AAGFPPHGDT GSVEGAPQPT DNGFTPKCEI VGKDALSALA RASTKQCQQE IANVVCLHQA GSLMPKAVPR HCQLTGKMSP GIQWDESQAQ QPMDGPPVRI AYMLVVHGRA IRQLKRLLKA VYHEQHFFYI HVDKRSDYLH REVVELAQGY DNVRVTPWRM VTIWGGASLL TMYLRSMRDL LEVPGWAWDF FINLSATDYP TRTNEELVAF LSKNRDKNFL KSHGRDNSRF IKKQGLDRLF HECDSHMWRL GERQIPAGIV VDGGSDWFVL TRSFVEYVVY TDDPLVAQLR QFYTYTLLPA ESFFHTVLEN SLACETLVDN NLRVTNWNRK LGCKCQYKHI VDWCGCSPND FKPQDFLRLQ QVSRPTFFAR KFESTVNQEV LEILDFHLYG SYPPGTPALK AYWENTYDAA DGPSGLSDVM LTAYTAFARL SLHHAATAAP PMGTPLCRFE PRGLPSSVHL YFYDDHFQGY LVTQAVQPSA QGPAETLEMW LMPQGSLKLL GRSDQASRLQ SLEVGTDWDP KERLFRNFGG LLGPLDEPVA VQRWARGPNL TATVVWIDPT YVVATSYDIT VDTETEVTQY KPPLSRPLRP GPWTVRLLQF WEPLGETRFL VLPLTFNRKL PLRKDDASWL HAGPPHNEYM EQSFQGLSSI LNLPQPELAE EAAQRHTQLT GPALEAWTDR ELSSFWSVAG LCAIGPSPCP SLEPCRLTSW SSLSPDPKSE LGPVKADGRL RKLHHHHHH

Purity

Purity as determined by densitometric image analysis: >95%

Endotoxin

< 0.1 EU/ug

Formulation:

Filtered (0.4 µm) and lyophilized in 0.05 M phosphate buffer, 0.075 M NaCl, pH 7.4

BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno-Řečkovice a Mokrá Hora, Czech Republic

Phone: +420-549-124-185, Fax: +420-549-211-460
E-mail: info@biovendor.com, sales@biovendor.com
Web: www.biovendor.com
There are BioVendor branches and distributors near you.
To find the office closest to you, visit www.biovendor.com/contact

Reconstituion:
Add deionized water to prepare a working stock solution of approximately 0.5 mg/ml and let the lyophilized pellet dissolve completely. Product is not sterile! Filter your culture media/working solutions containing this product before using in cell culture.

Shipping
At ambient temperature. Upon receipt, store the product at the temperature recommended below.

Storage, Stability/Shelf Life
Store the lyophilized protein at –80 °C. Lyophilized protein remains stable until the expiry date when stored at –80 °C. Aliquot reconstituted protein to avoid repeated freezing/thawing cycles and store at –80 °C for long term storage. Reconstituted protein can be stored at 4 °C for three days.

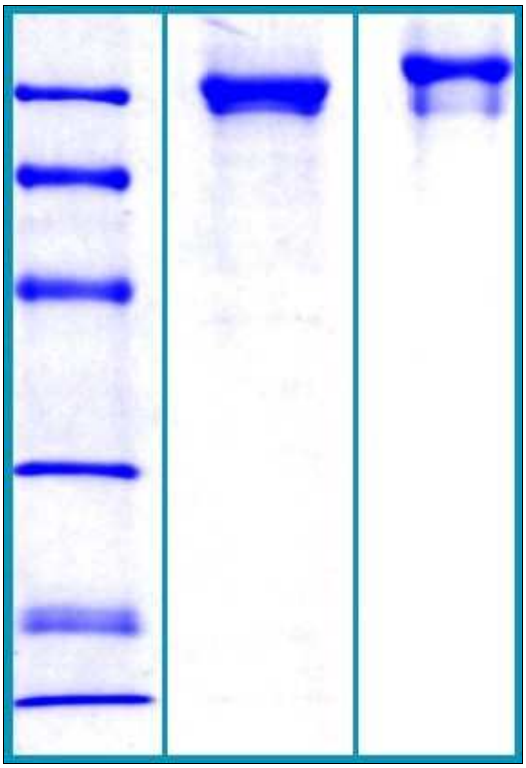
Quality control
BCA to determine quantity of the protein.

SDS PAGE to determine purity of the protein.

LAL to determine quantity of endotoxin.

Applications
Cell culture and/or animal studies, ELISA, Western blotting

Note
This product is intended for research use only.



14 % SDS-PAGE separation of Human Xylosyltransferase 2:
1. MW marker – 14, 21, 31, 45, 66, 97 kDa
2. reduced and boiled sample, 2.5 µg/lane
3. non-reduced and non-boiled sample, 2.5 µg/lane

BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno-Řečkovice a Mokrá Hora, Czech Republic

Phone: +420-549-124-185, Fax: +420-549-211-460
E-mail: info@biovendor.com, sales@biovendor.com
Web: www.biovendor.com
There are BioVendor branches and distributors near you.
To find the office closest to you, visit www.biovendor.com/contact

BioVendor - Laboratorní medicína a.s.
Karásek 1767/1
621 00 Brno-Řečkovice a Mokrá Hora, Czech Republic

Phone: +420-549-124-185, Fax: +420-549-211-460
E-mail: info@biovendor.com, sales@biovendor.com
Web: www.biovendor.com

There are BioVendor branches and distributors near you.
To find the office closest to you, visit www.biovendor.com/contact