

Product datasheet for **SC321203**

HEXB (NM_000521) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HEXB (NM_000521) Human Untagged Clone
Tag:	Tag Free
Symbol:	HEXB
Synonyms:	ENC-1AS; HEL-248; HEL-S-111
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC (PS100020)
E. coli Selection:	Ampicillin (100 ug/mL)



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Fully Sequenced ORF: >OriGene sequence for NM_000521.2
 GGCGAAAGCAGCCGAGCGGCCATGGAGCTGTGCGGGCTGGGGCTGCCCCGGCCGCCAT
 GCTGCTGGCGCTGCTGTTGGCGACACTGCTGGCGGCGATGTTGGCGCTGCTGACTCAGGT
 GGCGCTGGTGGTGCAGGTGGCGGAGGGCTCGGGCCCCGAGCGTCTCGGCCAAGCCGGG
 GCCGGCGCTGTGGCCCCGCGCTCTCGGTGAAGATGACCCCGAACCTGCTGCATCTCGC
 CCCGGAGAACTTCTACATCAGCCACAGCCCAATTCCACGGCGGGCCCCCTCTGCACCCT
 GCTGGAGGAAGCGTTTCGACGATATCATGGCTATATTTTTGGTTTCTACAAGTGGCATCA
 TGAACCTGCTGAATTCAGGCTAAAACCCAGGTTCAAGCAACTTCTGTCTCAATCACCT
 TCAGTCAGAGTGTGATGCTTTCCCAACATATCTTCAGATGAGTCTTATACTTTACTTGT
 GAAAGAACCAGTGGCTGCTTAAAGCCAAACAGAGTTTGGGGAGCATTACGAGGTTTAGA
 GACCTTTAGCCAGTTAGTTTATCAAGATTCTTATGGAACCTTACCATCAATGAATCCAC
 CATTATTGATTCTCAAGTTTTCTCACAGAGGAATTTGATTGATACATCCAGACATTA
 TCTGCCAGTTAAGATTATCTTAAACTCTGGATGCCATGGCTTTAATAAGTTTAAATGT
 TCTTCACTGGCACATAGTTGATGACCAGTCTTCCCATATCAGAGCATCACTTTTCTGA
 GTTAAGCAATAAAGGAAGCTATTCTTTGTCTCATGTTTATACACCAAATGATGTCGGTAT
 GGTGATTGAATATGCCAGATTACGAGGAATTCGAGTCCTGCCAGAATTTGATACCCCTGG
 GCATACACTATCTGGGGAAAAGGTCAGAAAGACCTCCTGACTCCATGTTACAGTAGACA
 AAACAAGTTGGACTCTTTTGGACCTATAAACCTACTCTGAATACAACATACAGTTCCT
 TACTACATTTTTCAAAGAAATTAGTGAGGTGTTCCAGATCAATTCATTCATTTGGGAGG
 AGATGAAGTGGAAATTTAAATGTTGGGAATCAAATCCAAAAATTCAGATTTTATGAGGCA
 AAAAGGCTTTGGCACAGATTTTAAAGAACTAGAATCTTTCTACATTCAAAGGTTTTGGA
 TATTATTGCAACCATAAACAAGGGATCCATTGTCTGGCAGGAGGTTTTTGTGATAAAGC
 AAAGCTTGGCGCCGGCACAAATAGTTGAAGTATGGAAAGACAGCGCATATCCTGAGGAACT
 CAGTAGAGTCACAGCATCTGGCTTCCCTGTAATCCTTTCTGCTCCTTGGTACTTAGATTT
 GATTAGCTATGGACAAGATTGGAGGAAATACTATAAAGTGAACCTCTTGATTTTGGCGG
 TACTCAGAAACAGAAACAACCTTTTATTGGTGGAGAAGCTTGTCTATGGGGAGAATATGT
 GGATGCAACTAACCTCACTCCAAGATTATGGCCTCGGGCAAGTGTGTTGGTGGAGACT
 CTGGAGTTCCAAAGATGTCAGAGATATGGATGACGCCTATGACAGACTGACAAGGCACCG
 CTGCAGGATGGTGAACGTGGAATAGCTGCACAACCTCTTATGCTGGATATTGTAACCA
 TGAGAACATGTAATAAAGGAGGGAAAAAGGCCACAGCAATCTGTACTACAATCAACTT
 TATTTTGAATCATGTAATAAAGATATTAGACTGTTTTTGAATAAAATATTTTATTG
 ATTGAAAAAAAAAAAAAAAAAAAAA

Restriction Sites: Please inquire

ACCN: NM_000521

OTI Disclaimer: Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).

OTI Annotation: This TrueClone is provided through our Custom Cloning Process that includes sub-cloning into OriGene's pCMV6 vector and full sequencing to provide a non-variant match to the expected reference without frameshifts, and is delivered as lyophilized plasmid DNA.

Components: The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

Reconstitution Method:

1. Centrifuge at 5,000xg for 5min.
2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.

RefSeq: [NM_000521.2](#), [NP_000512.1](#)

RefSeq Size: 1857 bp

RefSeq ORF: 1671 bp

Locus ID: 3074

UniProt ID: [P07686](#)

Cytogenetics: 5q13.3

Domains: Glyco_hydro_20

Protein Families: Druggable Genome, Transmembrane

Protein Pathways: Amino sugar and nucleotide sugar metabolism, Glycosaminoglycan degradation, Glycosphingolipid biosynthesis - ganglio series, Glycosphingolipid biosynthesis - globo series, Lysosome, Metabolic pathways, Other glycan degradation

Gene Summary: Hexosaminidase B is the beta subunit of the lysosomal enzyme beta-hexosaminidase that, together with the cofactor GM2 activator protein, catalyzes the degradation of the ganglioside GM2, and other molecules containing terminal N-acetyl hexosamines. Beta-hexosaminidase is composed of two subunits, alpha and beta, which are encoded by separate genes. Both beta-hexosaminidase alpha and beta subunits are members of family 20 of glycosyl hydrolases. Mutations in the alpha or beta subunit genes lead to an accumulation of GM2 ganglioside in neurons and neurodegenerative disorders termed the GM2 gangliosidoses. Beta subunit gene mutations lead to Sandhoff disease (GM2-gangliosidosis type II). Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, May 2014]

Transcript Variant: This variant (1) encodes the longer isoform (1).