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Product datasheet for SC335387

HEXB (NM_001292004) Human Untagged Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	HEXB (NM_001292004) Human Untagged Clone
Tag:	Tag Free
Symbol:	HEXB
Synonyms:	ENC-1AS; HEL-248; HEL-S-111
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
Fully Sequenced ORF:	>SC335387 representing NM_001292004. Blue=Insert sequence Red=Cloning site Green=Tag(s) GCTCGTTTAGTGAACCGTCAGAATTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTG GATCCGGTACCGAGGAGATCTGCCGCCGCGATCGCC ATGGCTTTTAATAAGTTTAATGTTCTTCACTGGCACATAGTTGATGACCAGTCTTTCCCATATCAGAGC ATCACTTTTCCTGAGTTAAGCAATAAAGGAAGCTATTCTTTGTCTCATGTTTATACACCAAATGATGTC CGTATGGTGATTGAATATGCCAGATTACGAGGAATTCGAGTCCTGCCAGAATTTGATACCCCTGGGCAT ACACTATCTTGGGGAAAAGGTCAGAAAGACCTCCTGACTCCATGTTACAGTAGACAAAACAAGTTGGAC TCTTTTGGACCTATAAACCCTACTCTGAATACAACATACAGCTTCCTTACTACATTTTTCAAAGAAATT AGTGAGGTGTTTCCAGATCAATTCATTCATTTGGGAGGAGATGAAGTGGAATTTAAATGTTGGGAATCA AATCCAAAAATTCAAGATTTCATGAGGCAAAAAGGCTTTGGCACAGATTTTAAGAAACTAGAATCTTTC TACATTCAAAAGGTTTTGGATATTATTGCAACCATAAACAAGGGATCCATTGTCTGGCAGGAGGTTTTT GATGATAAAGCAAAGCTTGCGCCGGGCACAATAGTTGAAGTATGGAAAGACAGCGCATATCCTGAGGAA CTCAGTAGAGTCACAGCATCTGGCTTCCCTGTAATCCTTTCTGCTCCTTGGTACTTAGATTTGATTAGC TATGGACAAGATTGGAGGAAATACTATAAAGTGGAACCTCTTGATTTTGGCGGTACTCAGAAACAGAAA CAACTTTTCATTGGTGGAGAAGCTTGTCTATGGGGAGAATATGTGGATGCAACTAACCTCACTCCAAGA TTATGGCCTCGGGCAAGTGCTGTTGGTGAGAGACTCTGGAGTTCCAAAGATGTCAGAGATATGGATGAC GCCTATGACAGACTGACAAGGCACCGCTGCAGGATGGTCGAACGTGGAATAGCTGCACAACCTCTTTAT GCTGGATATTGTAACCATGAGAACATGTAA ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGAT TACAAGGATGACGACGATAAGGTTTAAACGGCCGGC
Restriction Sites:	SgfI-MluI

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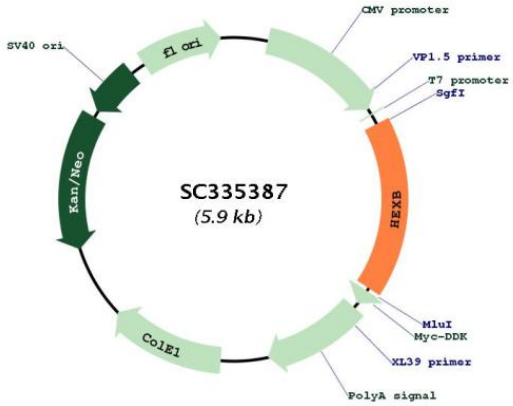
Plasmid Map:



ACCN:	NM_001292004
Insert Size:	996 bp
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).
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_001292004.1
RefSeq Size:	2039 bp
RefSeq ORF:	996 bp
Locus ID:	3074
UniProt ID:	P07686
Cytogenetics:	5q13.3

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
MW:	38.3 kDa
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 (2) contains an alternate 5' terminal exon, which causes translation initiation at a downstream AUG start codon, compared to variant 1. The resulting isoform (2) has a shorter N-terminus, compared to isoform 1.