

Product datasheet for SC125901

HLAB (HLA-B) (BC013187) Human Untagged Clone

Product data:

| | |
|---------------------------|--|
| Product Type: | Expression Plasmids |
| Product Name: | HLAB (HLA-B) (BC013187) Human Untagged Clone |
| Tag: | Tag Free |
| Symbol: | HLAB |
| Synonyms: | AS; Bw-47; Bw-50; HLAB; SPDA1 |
| Mammalian Cell Selection: | None |
| Vector: | <u>pCMV6-XL5</u> |
| E. coli Selection: | Ampicillin (100 ug/mL) |

Fully Sequenced ORF: >OriGene sequence for BC013187 edited
GACGCCGAGATGCGGGTCACGGCGCCCCGAACCGTCCTCCTGCTGCTCTCGGGAGCCCTG
GCCCTGACCGAGACCTGGGCCGGCTCCCACTCCATGAGGTATTTCTACACCGCCATGTCC
CGGCCCGGCCGCGGGAGCCCCGCTTCATCTCAGTGGGCTACGTGGACGACACGCAGTTC
GTGAGGTTTCGACAGCGACGCCGCGAGTCCGAGAGAGGAGCCGCGGGCGCCGTGGATAGAG
CAGGAGGGGCCGGAGTATTGGGACCGGAACACACAGATCTGCAAGACCAACACACAGACT
TACCGAGAGAGCCTGCGGAACCTGCGCGGCTACTACAACCAGAGCGAGGCCGGGTCTCAC
ACCCTCCAGAGGATGTACGGCTGCGACGTGGGGCCGGACGGGCGCCTCCTCCGCGGGCAT
GACCACTACGCTACGACGGCAAGGATTACATCGCCCTGAACGAGGACCTGAGCTCCTGG
ACCGCGGGGACACGGCGGCTCAGATCACCCAGCGCAAGTGGGAGGCGGCCCGTGAGGCG
GAGCAGCTGAGAGCCTACCTGGAGGGCCTGTGCGTGGAGTGGCTCCGAGATACCTGGAG
AACGGGAAGGAGACGCTGCAGCGCGGACCCCCAAAGACACATGTGACCCACCACCCC
ATCTCTGACCATGAGGCCACCCTGAGGTGCTGGGCCCTGGGCTTCTACCTGCGGAGATC
ACACTGACCTGGCAGCGGGATGGCGAGGACAACTCAGGACACCGAGCTTGTGGAGACC
AGACCAGCAGGAGATAGAACCTTCCAGAAGTGGGACGCTGTGGTGGTGCCTTCTGGAGAA
GAGCAGAGATACACATGCCATGTACAGCATGAGGGGCTGCCGAAGCCCCCTCACCTGAGA
TGGGAGCCATCTCCAGTCCACCATCCCATCGTGGGCATTGTTGCTGGCCTGGCTGTC
CTAGCAGTTGTGGTCATCGGAGCTGTGGTCGCTACTGTGATGTGTAGGAGGAAGAGCTCA
GGTGGAAAAGGAGGGAGCTACTCTCAGGCTGCGTCCAGCGACAGTGCCCAAGGGCTGAT
GTGTCTCTCACAGCTTGAAGCCTGAGACAGCTGTCTTGTGAGGACTGAGATGCAGGA
TTTCTTACGCTCCCTTTGTGACTTCAAGAGCCTCTGGCATCTCTTTCTGCAAAGGCA
CCTGAATGTGTCTGCGTCCCTGTTAGCATAATGTGAGGAGGTGGAGAGACAGCCACCCT
TGTGTCCACTGTGACCCCTGTTCCCATGCTGATCTGTGTTTCTCCCAAGTCATCTTTCT
TGTTCCAGAGAGGTGGGCTGGATGTCTCCATCTGTCTCAACTTTATGTGCACTGAGC
TGCAACTTCTTACTTCCCTACTGAAAATAAGAATCTGAATATAAATTTGTTTTCTCAAAT
ATTTGCTATGAGAGGTTGATGGATTAATTAATAAGTCAATTCTGGAATTTGAAAGAGC
AAATAAGACCTGAGAACCTTCCAGAAAAAAAAAAAAAAAAAAAAA



[View online »](#)

| | |
|-------------------------------------|--|
| 5' Read Nucleotide Sequence: | >OriGene 5' read for BC013187 unedited CGCCAGAATTGTATACCACTCACTATGGGCGGACCGCGATTTCANATCTGGTACCGGTCCG GAATTCCTCCGGATATCGTCGACCCACGCGTCCGGACGCCGAGATGCGGGTACGGCGCCC CGAACCGTCTCTGCTGCTCTCGGGAGCCCTGGCCCTGACCGAGACCTGGGCCGGCTCC CACTCCATGAGGTATTTCTACACCGCCATGTCCCGGCCGGCCGCGGGGAGCCCCGCTTC ATCTCAGTGGGCTACGTGGACGACACGCAGTTCGTGAGGTTGACAGCGACGCCGCGAGT CCGAGAGAGGCCCGGGCGCCGTGGATAGAGCAGGAGGGGCCGGAGTATTGGGACCGG AACACACAGATCTGCAAGACCAACACAGACTTACCGAGAGAGCCTGCGGAACCTGCGC GGCTACTACAACAGAGCGAGGCCGGTCTCACACCCTCAGAGGATGTACGGCTGCGAC GTGGGGCCGGACGGGCGCCTCTCCGCGGGCATGACCAGTACGCCTACGACGGCAAGGAT TACATCGCCCTGAACGAGGACCTGAGCTCCTGGACCGCGCGGACACGGCGGCTCAGATC ACCCAGCGCAAGTGGGAGGCGCCCGTGGGCGGAGCAGCTGAGAGCCTACCTGGAGGGC CTGTGCGTGGAGTGGCTCCGCAGATACCTGGAGAACGGGAAGGAGACGCTGCAGCGCGG GACCCCCAAAGACACATGTGACCCACCACCCATCTCTGACCATGANGCCACCCTGAGG TGCTGGGCCCTGNGCTTCTACCCTGCGAGATCACACTGACCTGGCAGCGGGATGGCGAG GACCAAACCTCANGACACCGAGCTTGTGGAGACCAGACAGCNAGAGATAGAACCTTCCAAA AGTGGCAGCTGTGGTGGTCCCTCTGGAGAAAACA |
| Restriction Sites: | NotI-NotI |
| ACCN: | BC013187 |
| 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: | <ol style="list-style-type: none"> 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: | BC013187.1 , AAH13187.1 |
| RefSeq Size: | 1542 bp |
| Locus ID: | 3106 |
| Cytogenetics: | 6p21.33 |
| Protein Families: | Transmembrane |
| Protein Pathways: | Allograft rejection, Antigen processing and presentation, Autoimmune thyroid disease, Cell adhesion molecules (CAMs), Endocytosis, Graft-versus-host disease, Natural killer cell mediated cytotoxicity, Type I diabetes mellitus, Viral myocarditis |

Gene Summary:

HLA-B belongs to the HLA class I heavy chain paralogues. This class I molecule is a heterodimer consisting of a heavy chain and a light chain (beta-2 microglobulin). The heavy chain is anchored in the membrane. Class I molecules play a central role in the immune system by presenting peptides derived from the endoplasmic reticulum lumen. They are expressed in nearly all cells. The heavy chain is approximately 45 kDa and its gene contains 8 exons. Exon 1 encodes the leader peptide, exon 2 and 3 encode the alpha1 and alpha2 domains, which both bind the peptide, exon 4 encodes the alpha3 domain, exon 5 encodes the transmembrane region and exons 6 and 7 encode the cytoplasmic tail. Polymorphisms within exon 2 and exon 3 are responsible for the peptide binding specificity of each class one molecule. Typing for these polymorphisms is routinely done for bone marrow and kidney transplantation. Hundreds of HLA-B alleles have been described. [provided by RefSeq, Jul 2008]