

Product datasheet for **MR203273**

H2-Ea-ps (NM_010381) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	H2-Ea-ps (NM_010381) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	H2-Ea-ps
Synonyms:	A1323765; E-alpha-f; H-2Ea; H2-Ea; I-Ealpha; Ia-3; Ia3; MHC-H2-Ea
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>MR203273 representing NM_010381 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGCCACAATTGGAGCCCTGCTGTTAAGATTTTTCTTCATTGCTGTTCTGATGAGCTCCCAGAAGTCAT
GGGCTATCAAAGAGGAACACACCATCATCCAGGCGGAGTTCTATCTTTTACCAGACAAACGTGGAGAGTT
TATGTTTGACTTTGACGGCGATGAGATTTCCATGTAGACATTGAAAAGTCAGAGACCATCTGGAGACTT
GAAGAATTTGCAAAGTTGCCAGCTTTGAGGCTCAGGGTGCCTGCTAATATAGCTGTGGACAAAGCTA
ACCTGGATGTCATGAAAGAGCGTTCCAACAACACTCCAGATGCCAACGTGGCCCCAGAGGTGACTGTACT
CTCCAGAAGCCCTGTGAACCTGGGAGAGCCAACATCCTCATCTGTTTCATTGACAAGTTCTCCCTCCA
GTGGTCAATGTCACCTGTTCCGGAATGGACGGCTGTCACCGAAGGCGTGTGAGAGACAGTGTCTCC
CGAGGGACGATCACCTCTCCGCAAATCCACTATCTGACCTTCCTGCCCTCCACAGATGATTTCTATGA
CTGTGAGGTGGATCACTGGGTTTGGAGGAGCCTCTGCGGAAGCACTGGGAGTTTGAAGAGAAAACCTC
CTCCAGAAACTACAGAGAATGTCGTGTGTCTTGGGTTGTTGTGGGCTGGTGGGCATCGTTGTGG
GGATTATCCTCATCATGAAGGTATTAACAAACGCAATGTTGTAGAACCGCGACAAGGAGCCCTG

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



Protein Sequence: >MR203273 representing NM_010381
 Red=Cloning site Green=Tags(s)

MATIGALLRFFFIIVLMSQKSWAIKEEHTIIQAEFYLLPDKRGEFMDFDGDGEIFHVDIEKSETIWRL
 EEFAKFASFEAQGALANIAVDKANLDVMKERSNNTPDANVAPEVTVLSRSPVNLGEPNIIICFIDKFSP
 VVNVTFWRNGRPVTEGVSETVFLPRDDHLFRKFHYLTFLLPSTDDFYDCEVDHWGLLEEPLRKHWEFEKTL
 LPETTENVVICALGLFVGLVGIIVGIIILIMKGIKKRNVVERRQGAL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mm9024_d04.zip

Restriction Sites: SgfI-MluI

Cloning Scheme:

Cloning sites used for ORF Shuttling:



* The last codon before the Stop codon of the ORF

ACCN: NM_010381

ORF Size: 765 bp

OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. [More info](#)

OTI Annotation: This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.

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_010381.2](#), [NP_034511.2](#)

RefSeq Size: 887 bp

RefSeq ORF: 768 bp

Locus ID: 100504404

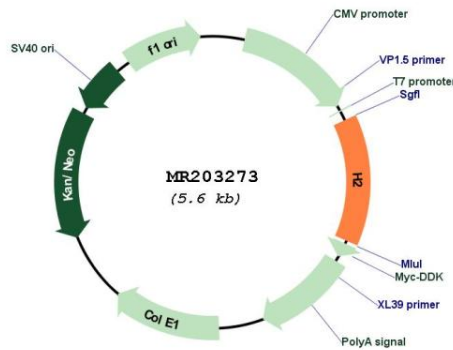
UniProt ID: [P04224](#)

Cytogenetics: 17 17.98 cM

MW: 29.6 kDa

Gene Summary: This locus belongs to the class II major histocompatibility complex (MHC) family of genes, which encode immune response (Ia) antigens that function in the T-cell-dependent immune response. This family member has multiple haplotypes, some of which result in the production of an E-alpha subunit that combines with an E-beta subunit to form a functional E complex at the cell surface. Other haplotypes, including that of the reference genome allele, contain mutations and they thus represent polymorphic pseudogenes that do not produce functional products. These mutations include frameshifting indels, nonsense mutations, and deletions of larger regions. The reference genome haplotype contains a deletion at the 5' end of the gene, including the core promoter region and the transcription start site, and therefore no transcripts result from this haplotype. [provided by RefSeq, Aug 2011]

Product images:



Circular map for MR203273