

Product datasheet for **MR225578**

P4htm (NM_028944) Mouse Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	P4htm (NM_028944) Mouse Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	P4htm
Synonyms:	4933406E20Rik; AI853847; BB128974; Ph-4
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)



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ORF Nucleotide Sequence:

>MR225578 ORF sequence
 Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGCATCGCC**

ATGGCGGCAGCGGTGGCGACCGTGCAGCGCCCTGAGGCTGAGACAGTCGAGGAGGCCCTCAAATCTTCAGT
 GGCCGCTACCACCGGAGCATCGCCCTCCGGGGCAGCGACCAGACCAGGGGATAGTGAAGACGCCCGGT
 GCGGCCACTGTGCAAGCCGCGGGGCATCTGTTCCCGTGCCTACTTCTTGGTGCTGATGGTGTTCGTGCAC
 CTGTACTTGGGCAACGTGCTGGCCCTGCTGCTCTTCGTGCACTACAGCAACGGAGACGAGAGCACAGACC
 CCGGACCCAGCGCCGCGAGCAGAGCCCCAGCCAGTGCCAACCTTGGTCCCCTCACCCGGCTGGAGGG
 CATCAAGTGGGATATGAGCGGAAAGTCCAGTGGTGCAGGGCAGGGATCACTTCATCCGAACCTCAGC
 CTCAAGCCGCTGCTTTTTGAAATCCAGGCTTCTGAGTGACGAGGAGTGTGGCTCATCATCCACCTGG
 CACAGATGAAAGGGTTACAGCGAAGCCAGATCCTGCCACTGAGGAGTATGAGGAGGCGATGAGCGCCAT
 GCAGGTCAGCCAGCTGGACCTCTCCAGCTGTTGGATCAGAACCAGCAGGTCGCCTGCAGCTCCGAGAG
 GTCTGGCCAGACTCGCCTGGGAAATGGACGGTGGATGACTCCAGAGAACATTCAGGAGATGACTCTG
 CAATCAAAGCAGACCCTGACGGTATGGCGTGCTGAGTCTGCAGGAATTTTCCAACATGGACCTCCGAGA
 CTTCCACAAGTACATGAGGAGCCATAAGGCAGAAATCCAATGAGCTGGTGAGGAACAGCCACCACACATGG
 CTCCACCAGGGAGAGGGAGCACATCACGTATGCGTGCCATCCGCCAGAGGGTCTGCGCCTCACTCGCC
 TCTCCCGGAGATTGTGGAGTTCAGTGAGCCACTACAGTTGTACGATATGGTGAGGGAGGTCACACCA
 TGCCCATGTGGACAGCGGACCCGTGTACCCAGAGACCACTGCTCCCATACCAAGCTGGTAGCCAATGAA
 TCTGTACCGTTTGAGACCTCTGTGCTACATGACAGTGTGTTTTATTTGAACAATGTCACCCGGTGGGG
 GTGAGACCGTCTCCCTGTGGCAGACAACAGGACCTATGATGAAATGAGTCTGATTCAGGATGATGTCGA
 TCTCCGGGACACTCGAAGGCACTGTGACAAGGGCAACCTTCGTGTCAAGCCCAGCAAGGAATGCAGTC
 TTTTGGTACAACCTACCTTCTGATGGGCAAGGCTGGGTGGTGAAGTGGACGACTACTCGTTGCATGGGG
 GCTGCCTGGTCACCCGCGGCACCAAGTGGATCGCTAACAACCTGGATCAATGTGGACCCTAGCCGGGCACG
 GCAAGCCTTGTCCAGCAGGAGATGGCTCGTCTGGCTCGGGAAGGTGGCATGGACTACAACCCGAGTGG
 GCCTTGGACCGAGCCTACAGTATGCCCGTGTGGAGCTC

**ACCGGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA**

Protein Sequence:

>MR225578 protein sequence
 Red=Cloning site Green=Tags(s)

MAAAVATVQRPEAETVEEASNLQWPLPPEHRPSGAATRPGDSEDAPVRPLCKPRGICSRAYFLVLMVFVH
 LYLGNVLALLLFVHYSNGDESTDPGQRREQSPQPVPTLGPLTRLEGIKVGYERKVQVVAGRDFHIRTLS
 LKPLLFEIPGFSLDEECRLIIHLAQMKGQLQRSQILPTEEYEEAMSAMQVSQLDLFQLLDQNHGRLQLRE
 VLAQTRLGNRWMTPENIQEMYSAIKADPDGDGVLSLQEFNMMDLRDFHKYMRSHKAESNELVRNSHHTW
 LHQEGEGAHVMRAIRQRVLRRLTRLSPEIVEFSEPLQVVRYGEGGHYHAHVDSGPVYPETICSHTKLVANE
 SVPFETSCRYMTVLFYLNNTVGGGETVFPVADNRTYDEMSLIQDDVDLRDTRRHCDKGNLRVKPQQGTAV
 FWYNYLPDGQGWVGEVDDYSLHGGCLVTRGTKWIANNWINVDPSRARQALFQQEMARLAREGGMDSQPEW
 ALDRAYS DARVEL

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Restriction Sites:

Sgfl-MluI

Cloning Scheme:



ACCN: NM_028944

ORF Size: 1512 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_028944.4](#)

RefSeq Size: 1810 bp

RefSeq ORF: 1512 bp

Locus ID: 74443

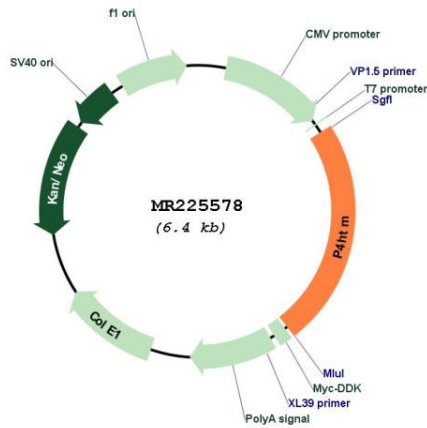
UniProt ID: [Q8BG58](#)

Cytogenetics: 9 F2

MW: 57 kDa

Gene Summary: Catalyzes the post-translational formation of 4-hydroxyproline in hypoxia-inducible factor (HIF) alpha proteins. Hydroxylates HIF1A at 'Pro-402' and 'Pro-564'. May function as a cellular oxygen sensor and, under normoxic conditions, may target HIF through the hydroxylation for proteasomal degradation via the von Hippel-Lindau ubiquitination complex.[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for MR225578