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Product datasheet for RG200308

PSME3 (NM_005789) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	PSME3 (NM_005789) Human Tagged ORF Clone
Tag:	TurboGFP
Symbol:	PSME3
Synonyms:	HEL-S-283; Ki; PA28-gamma; PA28G; PA28gamma; REG-GAMMA
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-AC-GFP (PS100010)
E. coli Selection:	Ampicillin (100 ug/mL)

ORF Nucleotide Sequence:

>RG200308 representing NM_005789
Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCCGCGATCGCC

ATGGCCTCGTTGCTGAAGGTGGATCAGGAAGTGAAGCTCAAGGTTGATTCTTTCAGGGAGCGGATCACAA
GTGAGGCAGAAGACTTGGTGGCAAATTTTTTCCCAAAGAAGTTATTAGAACTTGATAGTTTTCTGAAGGA
ACCAATCTTAAACATCCATGACCTAACTCAGATCCACTCTGACATGAATCTCCCAGTCCCTGACCCCATT
CTTCTCACCAATAGCCATGATGGACTGGATGGTCCCACTTATAAGAAGCGAAGGTTGGATGAGTGTGAAG
AAGCCTTCCAAGGAACCAAGGTGTTTGTGATGCCCAATGGGATGCTGAAAAGCAACCAGCAGCTGGTGGA
CATTATTGAGAAAGTGAAACCTGAGATCCGGCTGTTGATTGAGAAATGTAACACGGTCAAAATGTGGGTA
CAGCTCCTGATTCCCAGGATAGAAGATGGAAACAACTTTGGGGTGTCCATTCAGGAGGAAACAGTTGCAG
AGCTAAGAACTGTTGAGAGTGAAGCTGCATCTTATCTGGACCAGATTTCTAGATATTATATTACAAGAGC
CAAATTGGTTTCTAAAATAGCTAAATATCCCCATGTGGAGGACTATCGCCGCACCGTGACAGAGATTGAT
GAGAAAGAATATATCAGCCTTCGGCTCATCATATCAGAGCTGAGGAATCAATATGTCACTCTACATGACA
TGATCCTGAAAAATATCGAGAAGATCAAACGGCCCCGGAGCAGCAATGCAGAGACTCTGTAC

ACGCGTACGCGGCCGCTCGAG - GFP Tag - GTTTAA

This product is to be used for laboratory only. Not for diagnostic or therapeutic use.

View online »

Protein Sequence:

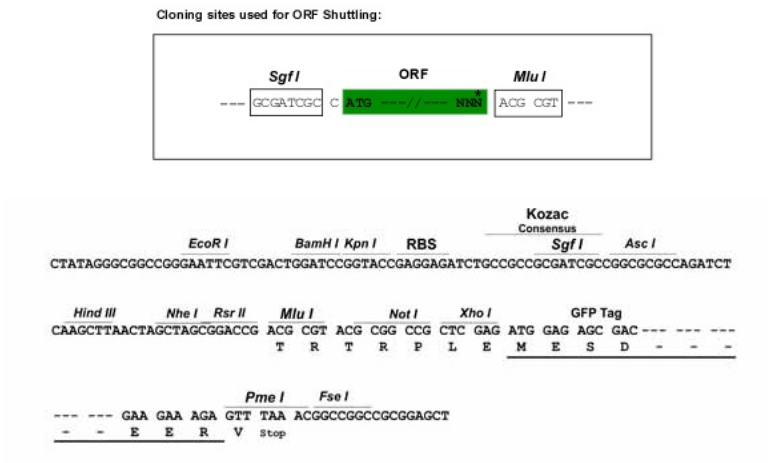
>RG200308 representing NM_005789
Red=Cloning site Green=Tags(s)

MASLLKVDQEVKLKVDSFRERITSEAEDLVANFFPKKLLELDSFLKEPILNIHDLTQIHSDMNLPVPDPI
LLTNSHDGLDGPTYKKRRLDECEEAFQGTKVFVMPNGMLKSNQQLVDIIEKVKPEIRLLIEKCNTVKMWV
QLLIPRIEDGNNFGVSIQEETVAELRTVESEAASYLDQISRYYITRAKLVSKIAKYPHVEDYRRTVTEID
EKEYISLRLIISELRNQYVTLHDMILKNIEKIKRPRSSNAETLY

TRTRPLE – GFP Tag – V

Restriction Sites: SgfI-MluI

Cloning Scheme:



ACCN: NM_005789

ORF Size: 762 bp

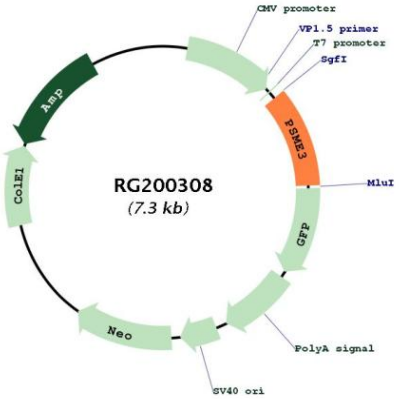
OTI Disclaimer: The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially 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_005789.4
RefSeq Size:	3189 bp
RefSeq ORF:	765 bp
Locus ID:	10197
UniProt ID:	P61289
Cytogenetics:	17q21.31
Domains:	PA28_alpha, PA28_beta
Protein Families:	Stem cell - Pluripotency
Protein Pathways:	Antigen processing and presentation, Proteasome
Gene Summary:	The 26S proteasome is a multicatalytic proteinase complex with a highly ordered structure composed of 2 complexes, a 20S core and a 19S regulator. The 20S core is composed of 4 rings of 28 non-identical subunits; 2 rings are composed of 7 alpha subunits and 2 rings are composed of 7 beta subunits. The 19S regulator is composed of a base, which contains 6 ATPase subunits and 2 non-ATPase subunits, and a lid, which contains up to 10 non-ATPase subunits. Proteasomes are distributed throughout eukaryotic cells at a high concentration and cleave peptides in an ATP/ubiquitin-dependent process in a non-lysosomal pathway. An essential function of a modified proteasome, the immunoproteasome, is the processing of class I MHC peptides. The immunoproteasome contains an alternate regulator, referred to as the 11S regulator or PA28, that replaces the 19S regulator. Three subunits (alpha, beta and gamma) of the 11S regulator have been identified. This gene encodes the gamma subunit of the 11S regulator. Six gamma subunits combine to form a homohexameric ring. Alternate splicing results in multiple transcript variants. [provided by RefSeq, May 2012]

Product images:



Circular map for RG200308