

Product datasheet for **RC208057**

ITM2A (NM_004867) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	ITM2A (NM_004867) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	ITM2A
Synonyms:	BRICD2A; E25A
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC208057 ORF sequence Red=Cloning site Blue=ORF Green=Tags(s)

TTTTGTAATACGACTCACTATAGGGCGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
GCC**CGATCGCC**

ATGGTGAAAATCGCCTTCAATACCCCTACCGCCGTGCAAAGGAGGAGGCGCGGCAAGACGTGGAGGCC
TCCTGAGCCGCACGGTCAGAACTCAGATACTGACCGGCAAGGAGCTCCGAGTTGCCACCCAGGAAAAAGA
GGGCTCCTCTGGGAGATGTATGCTTACTCTTTAGGCCTTCATTCATCTTGGCAGGACTTATTGTTGGT
GGAGCCTGCATTTACAAGTACTTCATGCCCAAGAGCACCATTTACCGTGGAGAGATGTGCTTTTTGATT
CTGAGGATCCTGCAAATCCCTTCGTGGAGGAGAGCCTAACTTCCTGCCTGTGACTGAGGAGGCTGACAT
TCGTGAGGATGACAACATTGCAATCATTGATGTGCTGTCCCAAGTTTCTCTGATAGTGACCTGCAGCA
ATTATTATGACTTTGAAAAGGGAATGACTGCTTACCTGGACTTGTGCTGGGAACTGCTATCTGATGC
CCCTCAATACTTCTATTGTTATGCCTCCAAAAATCTGGTAGAGCTCTTTGGCAAAGTGGCAGTGGCAG
ATATCTGCCTCAAACCTTATGTGGTTCGAGAAGACCTAGTTGCTGTGGAGGAAATTCGTGATGTTAGTAAC
CTTGGCATCTTTATTTACCAACTTTGCAATAACAGAAAGTCTCCGCCTTCGTCGCAGAGACCTTTGC
TGGGTTTCAACAAACGTGCCATTGATAAATGCTGGAAGATTAGACACTTCCCAACGAATTTATTGTTGA
GACCAAGATCTGTCAAGAG

ACGCGTACGCGGCCGCTCGAGCAGAAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
ACAAGGATGACGACGATAAGGTTTAA



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Protein Sequence: >RC208057 protein sequence
 Red=Cloning site Green=Tags(s)

MVKIAFNTPTAVQKKEARQDVEALLSRTVRTQILTGKELRVATQEKEGSSGRCLTLLGLSFILAGLIVG
 GACIYKYFMPKSTIYRGEMCFDSEDPANSLRGGEPNLPVTEEADIREDNIAIIDVPVPSFSDSDPAA
 I IHDFEKGMTAYLDLLLGNCYLMLPLNTSIVMPPKNLVELFGKLASGRYLPQTYVREDLVAVEEIRDVSN
 LGIFIIYQLCNNRKSFRLRRRDLLLGFNKRAIDKCKWIRHFPNEFIVETKICQE

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Chromatograms: https://cdn.origene.com/chromatograms/mk6089_a03.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_004867

ORF Size: 789 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_004867.5](#)

RefSeq Size: 1851 bp

RefSeq ORF: 792 bp

Locus ID: 9452

UniProt ID: [O43736](#)

Cytogenetics: Xq21.1

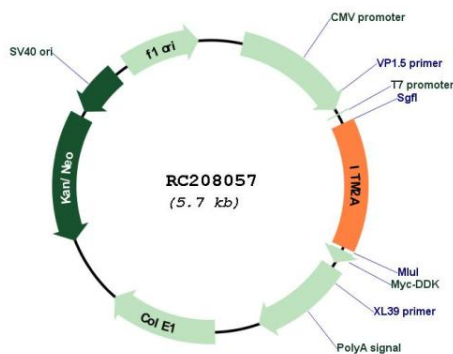
Domains: BRICHOS

Protein Families: Transmembrane

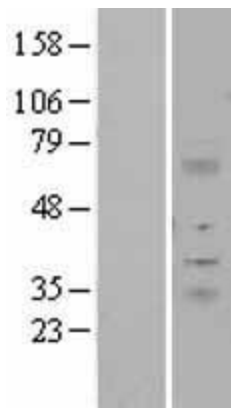
MW: 29.7 kDa

Gene Summary: This gene encodes a type II membrane protein that belongs to the ITM2 family. Studies in mouse suggest that it may be involved in osteo- and chondrogenic differentiation. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jan 2010]

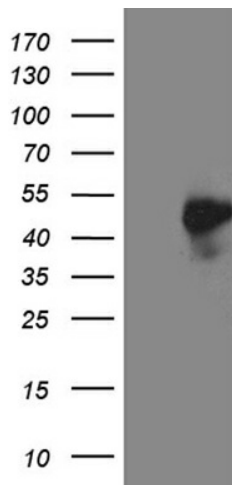
Product images:



Circular map for RC208057



Western blot validation of overexpression lysate (Cat# [LY401521]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC208057 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).



HEK293T cells were transfected with the pCMV6-ENTRY control (Cat# [PS100001], Left lane) or pCMV6-ENTRY ITM2A (Cat# RC208057, Right lane) cDNA for 48 hrs and lysed. Equivalent amounts of cell lysates (5 ug per lane) were separated by SDS-PAGE and immunoblotted with anti-ITM2A (Cat# [TA811863]). Positive lysates [LY401521] (100ug) and [LC401521] (20ug) can be purchased separately from OriGene.