

Product datasheet for RC229444

CAMSAP1 (NM_015447) Human Tagged ORF Clone

Product data:

Product Type:	Expression Plasmids
Product Name:	CAMSAP1 (NM_015447) Human Tagged ORF Clone
Tag:	Myc-DDK
Symbol:	CAMSAP1
Mammalian Cell Selection:	Neomycin
Vector:	pCMV6-Entry (PS100001)
E. coli Selection:	Kanamycin (25 ug/mL)
ORF Nucleotide Sequence:	>RC229444 representing NM_015447 Red=Cloning site Blue=ORF Green=Tags(s)

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Protein Sequence: >RC229444 representing NM_015447
 Red=Cloning site Green=Tags(s)

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Chromatograms: https://cdn.origene.com/chromatograms/mk8100_g07.zip

Restriction Sites: SgfI-MluI

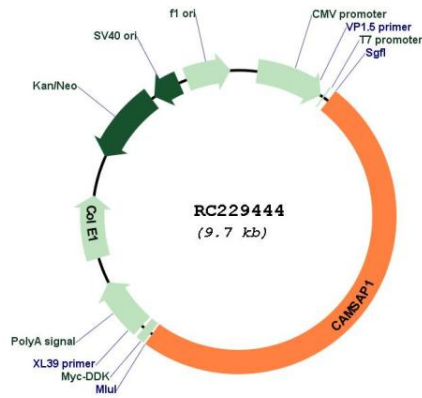
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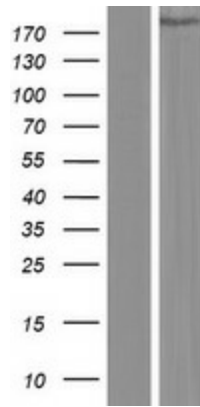
ACCN: NM_015447

ORF Size:	4806 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:	<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:	NM_015447.4
RefSeq Size:	7650 bp
RefSeq ORF:	4809 bp
Locus ID:	157922
UniProt ID:	Q5T5Y3
Cytogenetics:	9q34.3
MW:	178 kDa
Gene Summary:	Key microtubule-organizing protein that specifically binds the minus-end of non-centrosomal microtubules and regulates their dynamics and organization (PubMed:19508979, PubMed:21834987, PubMed:24486153, PubMed:24706919, PubMed:24117850). Specifically recognizes growing microtubule minus-ends and stabilizes microtubules (PubMed:24486153, PubMed:24706919). Acts on free microtubule minus-ends that are not capped by microtubule-nucleating proteins or other factors and protects microtubule minus-ends from depolymerization (PubMed:24486153, PubMed:24706919). In contrast to CAMSAP2 and CAMSAP3, tracks along the growing tips of minus-end microtubules without significantly affecting the polymerization rate: binds at the very tip of the microtubules minus-end and acts as a minus-end tracking protein (-TIP) that dissociates from microtubules after allowing tubulin incorporation (PubMed:24486153, PubMed:24706919). Through interaction with spectrin may regulate neurite outgrowth (PubMed:24117850).[UniProtKB/Swiss-Prot Function]

Product images:



Circular map for RC229444



Western blot validation of overexpression lysate (Cat# [LY432452]) using anti-DDK antibody (Cat# [TA50011-100]). Left: Cell lysates from untransfected HEK293T cells; Right: Cell lysates from HEK293T cells transfected with RC229444 using transfection reagent MegaTran 2.0 (Cat# [TT210002]).