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Product datasheet for RC224108L3V

Factor XII (F12) (NM_000505) Human Tagged ORF Clone Lentiviral Particle

Product data:

Product Type:	Lentiviral Particles
Product Name:	Factor XII (F12) (NM_000505) Human Tagged ORF Clone Lentiviral Particle
Symbol:	F12
Synonyms:	HAE3; HAEX; HAF
Mammalian Cell Selection:	Puromycin
Vector:	pLenti-C-Myc-DDK-P2A-Puro (PS100092)
Tag:	Myc-DDK
ACCN:	NM_000505
ORF Size:	1845 bp
ORF Nucleotide Sequence:	The ORF insert of this clone is exactly the same as(RC224108).
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.
RefSeq:	NM_000505.2, NP_000496.1
RefSeq Size:	2048 bp
RefSeq ORF:	1848 bp
Locus ID:	2161
UniProt ID:	P00748
Cytogenetics:	5q35.3
Domains:	KR, FN1, FN2, Tryp_SPc, EGF, EGF
Protein Families:	Druggable Genome, Protease, Secreted Protein

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Protein Pathways: Complement and coagulation cascades

MW: 67.82 kDa

Gene Summary: This gene encodes coagulation factor XII which circulates in blood as a zymogen. This single chain zymogen is converted to a two-chain serine protease with an heavy chain (alpha-factor XIIa) and a light chain. The heavy chain contains two fibronectin-type domains, two epidermal growth factor (EGF)-like domains, a kringle domain and a proline-rich domain, whereas the light chain contains only a catalytic domain. On activation, further cleavages takes place in the heavy chain, resulting in the production of beta-factor XIIa light chain and the alpha-factor XIIa light chain becomes beta-factor XIIa heavy chain. Prekallikrein is cleaved by factor XII to form kallikrein, which then cleaves factor XII first to alpha-factor XIIa and then to beta-factor XIIa. The active factor XIIa participates in the initiation of blood coagulation, fibrinolysis, and the generation of bradykinin and angiotensin. It activates coagulation factors VII and XI. Defects in this gene do not cause any clinical symptoms and the sole effect is that whole-blood clotting time is prolonged. [provided by RefSeq, Jul 2008]