



11763

Description MedNet

Messenger RNA encoding human vascular endothelial growth factor A, isoform 165.

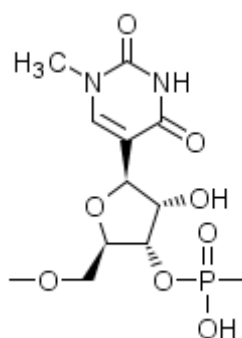
Schematic



UTR = Untranslated region; Coding region = human Vascular Endothelial Growth Factor A (VEGF-A165); poly(A) = polyadenylate signal tail.

U = m¹ψ =

1-methyl-3'-pseudouridylyl:



cap G¹A² =

m⁷G⁺-5'-ppp⁻-5'-Am:

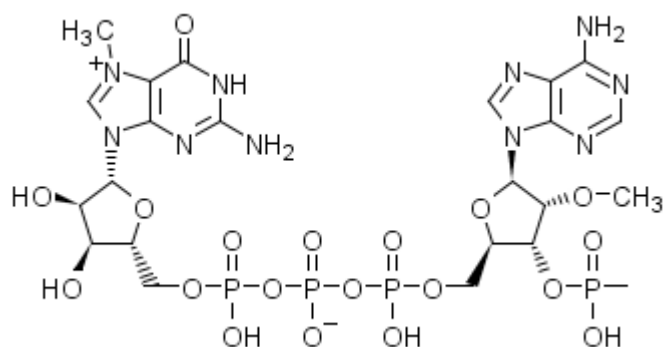


Table of Features

Element	Description	Position
Cap	5'-capped with 7-methylguanosinium 5'-triphosphate-(5'→5')-2'-O-methyladenylyl-(3'→5')	1 - 2 (bold, underlined)
5'-UTR	5'untranslated region (5'-UTR) based on the artificial 5'-UTR from Warren et al., 2010 (PMID: 20888316)	3 - 48 <u>(underlined)</u>
Coding region	Open reading frame (ORF) encoding	49 - 621

	human vascular endothelial growth factor A (VEGF-A ₁₆₅); 191-peptide including the signal 26-peptide	
	Stop codons; additional stop codons ensure complete translation termination	622 - 630 (bold, underlined)
3'-UTR	The 3'-untranslated region (3'-UTR) is derived from the human hemoglobin subunit alpha (HBA1) gene	631 - 740 <u>(underlined)</u>
Poly (A)	Poly (A) sequence	741 - 845 <i>(italics)</i>

Sequence / Séquence / Secuencia

GAGGAAAUAA GAGAGAAAAG AAGAGUAAGA AGAAAUAUAA GAGCCACCAU 50
 GAACUUUCUG CUGUCUUGGG UGCAUUGGAG CCUUGCCUUG CUGCUCUACC 100
 UCCACCAUGC CAAGUGGUCC CAGGCUGCAC CCAUGGCAGA AGGAGGAGGG 150
 CAGAAUCAUC ACGAAGUGGU GAAGUUCAUG GAUGUCUAUC AGCGCAGCUA 200
 CUGCCAUCCA AUCGAGACCC UGGUGGACAU CUUCCAGGAG UACCCUGAUG 250
 AGAUCGAGUA CAUCUUCAAG CCAUCCUGUG UGCCCCUGAU GCGAUGCGGG 300
 GGCUGCUGCA AUGACGAGGG CCUGGAGUGU GUGCCCACUG AGGAGUCCAA 350
 CAUCACCAUG CAGAUUAUGC GGAUCAAACC UCACCAAGGC CAGCACAUAG 400
 GAGAGAUGAG CUUCCUACAG CACAACAAAU GUGAAUGCAG ACCAAAGAAA 450
 GAUAGAGCAA GACAAGAAAA UCCUGUGGG CCUUGCUCAG AGCGGAGAAA 500
 GCAUUUGUUU GUACAAGAUC CGCAGACGUG UAAAUUGUUC UGCAAAAACA 550
 CAGACUCGCG UUGCAAGGCG AGGCAGCUUG AGUUAACGA ACGUACUUGC 600
 AGAUGUGACA AGCCGAGGCG **GUGAUAAUAG** GCUGGAGCCU CGGUGGCCAU 650
GCUUCUUGCC CCUUGGGCCU CCCCCAGCC CCUCCUCCU UUCCUGCACC 700
CGUACCCCG UGGUCUUUGA AUAAAGUCUG AGUGGGCGGC AAAAAAAAAA 750
 AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA 800
 AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA AAAAAAAAAA *UCUAG* 845

Where a, c, g and u denote AMP, CMP, GMP & N¹-methylpseudouridine, respectively.