

GENSCANW output for sequence 21:52:54

GENSCAN 1.0 Date run: 25-Jun-107 Time: 21:52:58

Sequence 21:52:54 : 23767 bp : 52.07% C+G : Isochore 3 (51 - 57 C+G%)

Parameter matrix: HumanIso.smat

Predicted genes/exons:

Gn.Ex	Type	S	.Begin	...End	.Len	Fr	Ph	I/Ac	Do/T	CodRg	P....	Tscr..
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1.01	Init	+	25	350	326	0	2	83	64	486	0.490	40.51
1.02	Intr	+	926	1013	88	2	1	69	55	69	0.401	2.17
1.03	Intr	+	8276	8334	59	1	2	132	48	9	0.161	-0.53
1.04	Intr	+	10089	10288	200	0	2	87	94	346	0.189	34.62
1.05	Intr	+	14776	14962	187	2	1	100	55	166	0.860	13.77
1.06	Intr	+	15420	15661	242	0	2	59	127	248	0.885	23.53
1.07	Intr	+	17518	17669	152	2	2	79	105	137	0.999	14.89
1.08	Intr	+	17797	17998	202	0	1	97	111	187	0.827	21.28
1.09	Intr	+	18730	18921	192	2	0	110	101	245	0.991	27.98
1.10	Intr	+	20524	20645	122	2	2	65	110	269	0.999	27.52
1.11	Intr	+	20739	20883	145	2	1	95	94	126	0.901	14.27
1.12	Term	+	22321	22448	128	2	2	63	41	162	0.970	7.75

Click [here](#) to view a PDF image of the predicted gene(s)

Click [here](#) for a PostScript image of the predicted gene(s)

Predicted peptide sequence(s) :

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>21:52:54|GENSCAN_predicted_peptide_1|680_aa
MVSKLSQLQTELLAALLESGLSKEALIQALGEPGPYLLAGEGPLDKGESCGGGRGELAEL
PNGLGETRGSEDETDDDGEDFTPPILKELENLSPEEAAHQKAVVETLLQHPTSPAGAIRG
CPFYIPIRWRTPRLLENWGDPQQRHDSQVASGPPFESLWEDPWRVAKMVKSYLQQHNIPQR
EVVDTTGLNQSHLSQHLNKGTPMKTQKRAALYTWYVRKQREVAQQFTHAGQGGLIEEPTG
DELPTKKGRNRRFKWGPASQQILFQAYERQKNPSKEERETLVEECNRAECIQRGVSPSQA
QGLGSNLVTEVRVYNWFANRRKEEAFRHKLAMDTYSGPPPGPGPGPALPAHSSPGLPPPA
LSPSKVHGVRYGQPATSETAEVPSSSGGPLVTVSTPLHQVSPTGLEPSHSLLSTEAKLVS
AAGGPLPPVSTLTALHSLEQTSPGLNQPQNLIMASLPGVMTIGPGEPASLGPTFTNTGA
STLVIGLASTQAQSVPVINSMGSSLTTLQPVQFFSQPLHPSYQQPLMPPVQSHVTQSPFMA
TMAQLQSPHALYSHKPEVAQYTHTGLLPQTMLTDTTNLSALASLTPTKQVFTSDTEASS
ESGLHTPASQATTLHVPSQDPASIQHLQPAHRLSASPTVSSSSLVLYQSSDSSNGQSHLL
PSNHSSVIETFISTQMASSSQ
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Explanation

Gn.Ex : gene number, exon number (for reference)
Type : Init = Initial exon (ATG to 5' splice site)
 Intr = Internal exon (3' splice site to 5' splice site)
 Term = Terminal exon (3' splice site to stop codon)
 Sngl = Single-exon gene (ATG to stop)
 Prom = Promoter (TATA box / initiation site)
 PlyA = poly-A signal (consensus: AATAAA)
S : DNA strand (+ = input strand; - = opposite strand)

Begin : beginning of exon or signal (numbered on input strand)
End : end point of exon or signal (numbered on input strand)
Len : length of exon or signal (bp)
Fr : reading frame (a forward strand codon ending at x has frame $x \bmod 3$)
Ph : net phase of exon (exon length modulo 3)
I/Ac : initiation signal or 3' splice site score (tenth bit units)
Do/T : 5' splice site or termination signal score (tenth bit units)
CodRg : coding region score (tenth bit units)
P : probability of exon (sum over all parses containing exon)
Tscr : exon score (depends on length, I/Ac, Do/T and CodRg scores)

Comments

The SCORE of a predicted feature (e.g., exon or splice site) is a log-odds measure of the quality of the feature based on local sequence properties. For example, a predicted 5' splice site with score > 100 is strong; 50-100 is moderate; 0-50 is weak; and below 0 is poor (more than likely not a real donor site).

The PROBABILITY of a predicted exon is the estimated probability under GENSCAN's model of genomic sequence structure that the exon is correct. This probability depends in general on global as well as local sequence properties, e.g., it depends on how well the exon fits with neighboring exons. It has been shown that predicted exons with higher probabilities are more likely to be correct than those with lower probabilities.