Long chain LR3 insulin-like growth factor (LR3 IGF-1)

Catalog Number: OM770035

Source: Recombinant gene engineering production, E. coli expression.

Product introduction

Long chain LR3 insulin-like growth factor (LR3 IGF-1), a member of the insulin gene family, is structurally similar to insulin precursor proteins and has better growth-promoting effects, which can promote the division, migration and differentiation of most cells.

The Long chain LR3 insulin-like growth factor (LONG-R3 IGF-I) is an analogue of human IGF-I containing 83 amino acids. Compared with IGF-1, LR3 IGF-1 has stronger biological activity and a longer half-life. In the LR3 IGF-1 protein, arginine replaces glutamic acid in the third position of the IGF-1 sequence, and the N-terminus is 13 more amino acids than IGF-1. The slight differences in amino acid sequences result in a lower affinity binding affinity between LR3 IGF-1 and IGF-BPs (IGF binding proteins) compared to IGF-1, increasing the half-life and biological activity of LR3 IGF-1. During cell culture, the biological activity of LR3 IGF-1 was significantly increased compared to insulin.

Product characteristics

Source	E.coli
Appearance	White, yellowish powder
Specific activity	Detection activity of rat L6 cell line＞1.0*105U/mg; Human cell line assay activity＞6.7*105U/mg
Purity (protein electrophoresis)	SDS-PAGE electrophoretic purity of up to 98%, RP-HPLC purity of up to 90%
Endotoxin	< 1 EU/mg
Molecular weight(mass spectrum)	9112Da

Storage and transport stability

Storage stability: Stored below -15℃, effective for two years.

Transport stability: refrigerated transport, stable activity.

Product advantages

High purity: SDS-PAGE electrophoresis purity of over 98%, RP-HPLC purity of over 90%, at the leading level in the industry

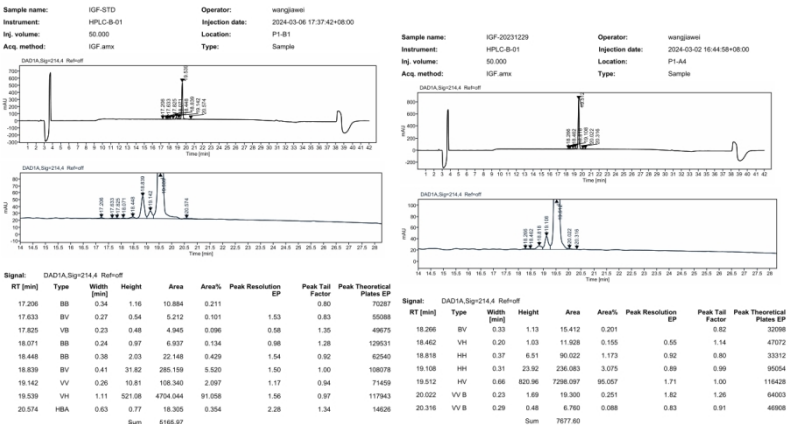
High activity: Rat L6 cell line detected activity>1.0 x 105; Human MCF-7 cell line detection activity>6.7 x 105 U/mg

Low endotoxin: less than 0.01 EU/ug

Production without animal sources, stable quality, and spot supply

Easy to use: No need for acid dissolution, neutral solution can be used for cell culture after dissolution

Industrial level production, suitable for any level



Signal: DAD1A,Sig=214,4 Ref=off								
RT [min]	Type	Width [min]	Height	Area	Area%	Peak Resolution EP	Peak Tail Factor	Peak Theoretical Plates EP
17.206	BB	0.34	1.16	10.884	0.211		0.80	70287
17.633	BV	0.27	0.54	5.212	0.101	1.53	0.83	55088
17.825	VB	0.23	0.48	4.945	0.096	0.58	1.35	49675
18.071	BB	0.24	0.97	6.937	0.134	0.98	1.28	129531
18.448	BB	0.38	2.03	22.148	0.429	1.54	0.92	62540
18.839	BV	0.41	31.82	285.159	5.520	1.50	1.00	108078
19.142	VV	0.26	10.81	108.340	2.097	1.17	0.94	71459
19.539	VH	1.11	521.08	4704.044	91.058	1.56	0.97	117943
20.574	HBA	0.63	0.77	18.305	0.354	2.28	1.34	14626
			Sum	5165.97				

Signal: DAD1A,Sig=214,4 Ref=off								
RT [min]	Type	Width [min]	Height	Area	Area%	Peak Resolution EP	Peak Tail Factor	Peak Theoretical Plates EP
18.266	BV	0.33	1.13	15.412	0.201		0.62	32098
18.462	VH	0.20	1.03	11.928	0.155	0.55	1.14	47072
18.818	HH	0.37	6.51	90.022	1.173	0.92	0.80	33312
19.108	HH	0.31	23.92	236.083	3.075	0.89	0.99	95054
19.512	HV	0.66	820.96	7298.097	95.057	1.71	1.00	116428
20.022	VV B	0.23	1.69	19.300	0.251	1.82	1.26	64003
20.316	VV B	0.29	0.48	6.760	0.088	0.83	0.91	46908
			Sum	7677.60				

The purity of internationally renowned competitors is 91%, and the purity of samples from batch 231229 of Omnimsbs is 95%

Product use and suggestions

When dissolved: It is recommended to dissolve with PBS, and the dissolution concentration does not exceed 1mg/ml.

Recommended concentration for cell culture: 5-100μg/L.

Recommended cell lines: HEK293, CHO cells to produce antibodies and proteins; Pluripotent stem cells, mesenchymal stem cells, muscle stem cells.