

STable 1. Comparison of IGF-I production and heparin binding activity between human IGF-I isoforms (1A, 1B, 1C, 2A, 2B and 2C)

	Comparison			p value	Result
IGF-I production	1A	vs.	1B	0.001	1A > 1B
	1A	vs.	1C	0.026	1A > 1C
	1A	vs.	2A	0.104	n.s.
	1A	vs.	2B	0.001	1A > 2B
	1A	vs.	2C	0.379	n.s.
	1B	vs.	1C	0.001	1B < 1C
	1B	vs.	2A	< 0.001	1B < 2A
	1B	vs.	2B	0.021	1B < 2B
	1B	vs.	2C	0.001	1B < 2C
	1C	vs.	2A	0.005	1C < 2A
	1C	vs.	2B	0.003	1C > 2B
	1C	vs.	2C	0.08	n.s.
Heparin binding activity	2A	vs.	2B	< 0.001	2A > 2B
	2A	vs.	2C	0.01	2A > 2C
	2B	vs.	2C	0.001	2B < 2C
	1A	vs.	1B	< 0.001	1A > 1B
	1A	vs.	1C	< 0.001	1A > 1C
	1A	vs.	2A	0.067	n.s.
	1A	vs.	2B	< 0.001	1A > 2B
	1A	vs.	2C	< 0.001	1A > 2C
	1B	vs.	1C	< 0.001	1B < 1C
	1B	vs.	2A	< 0.001	1B < 2A
	1B	vs.	2B	1	n.s.
	1B	vs.	2C	< 0.001	1B < 2C
1C	vs.	2A	< 0.001	1C < 2A	
1C	vs.	2B	< 0.001	1C > 2B	
1C	vs.	2C	0.066	n.s.	
2A	vs.	2B	< 0.001	2A > 2B	
2A	vs.	2C	< 0.001	2A > 2C	
2B	vs.	2C	< 0.001	2B < 2C	

n.s.: no significant difference.

STable 2. Comparison of IGF-I production and heparin binding activity between human IGF-I 1A and its truncated mutants (1A-noEA and 1A-noEx6)

	Comparison			p value	Result
IGF-I production	1A	vs.	1A-noEA	< 0.001	1A > 1A-noEA
	1A	vs.	1A-noEx6	0.078	n.s.
	1A-noEA	vs.	1A-noEx6	0.002	1A-noEA < 1A-noEx6
Heparin binding activity	1A	vs.	1A-noEA	< 0.001	1A > 1A-noEA
	1A	vs.	1A-noEx6	< 0.001	1A > 1A-noEx6
	1A-noEA	vs.	1A-noEx6	< 0.001	1A-noEA < 1A-noEx6

n.s.: no significant difference.

STable 3. Comparison of IGF-I production and heparin binding activity between human IGF-I 1A and its mutants (1A-N92A and 1A-noEA)

	Comparison			p value	Result
IGF-I production	1A	vs.	1A-N92A	0.291	n.s.
	1A	vs.	1A-noEA	0.003	1A > 1A-noEA
	1A-N92A	vs.	1A-noEA	0.002	1A-N92A > 1A-noEA
Heparin binding activity	1A	vs.	1A-N92A	< 0.001	1A > 1A-N92A
	1A	vs.	1A-noEA	< 0.001	1A > 1A-noEA
	1A-N92A	vs.	1A-noEA	0.001	1A > 1A-noEA

n.s.: no significant difference.

STable 4. Comparison of IGF-I production, GAG production and DNA content between human IGF-I 1A and its mutants (1A-noEA, 1A-R/A and 1A-R/K)

	Comparison			p value	Result
		vs.			
IGF-I production	1A	vs.	1A-noEA	0.005	1A > 1A-noEA
	1A	vs.	1A-R/A	0.008	1A < 1A-R/A
	1A	vs.	1A-R/K	0.001	1A > 1A-R/K
	1A-noEA	vs.	1A-R/A	0.001	1A-noEA < 1A-R/A
	1A-noEA	vs.	1A-R/K	0.301	n.s.
	1A-R/A	vs.	1A-R/K	0.001	1A-R/A > 1A-R/K
GAG production in medium	Control	vs.	1A	0.001	Control < 1A
	Control	vs.	1A-noEA	0.002	Control < 1A-noEA
	Control	vs.	1A-R/A	< 0.001	Control < 1A-R/A
	Control	vs.	1A-R/K	0.003	Control < 1A-R/K
	1A	vs.	1A-noEA	0.262	n.s.
	1A	vs.	1A-R/A	0.09	n.s.
	1A	vs.	1A-R/K	0.392	n.s.
	1A-noEA	vs.	1A-R/A	0.024	1A-noEA < 1A-R/A
	1A-noEA	vs.	1A-R/K	0.0867	n.s.
	1A-R/A	vs.	1A-R/K	0.047	1A-R/A > 1A-R/K
GAG production in cell layer	Control	vs.	1A	< 0.001	Control < 1A
	Control	vs.	1A-noEA	< 0.001	Control < 1A-noEA
	Control	vs.	1A-R/A	< 0.001	Control < 1A-R/A
	Control	vs.	1A-R/K	< 0.001	Control < 1A-R/K
	1A	vs.	1A-noEA	0.002	1A > 1A-noEA
	1A	vs.	1A-R/A	0.013	1A < 1A-R/A
	1A	vs.	1A-R/K	0.013	1A > 1A-R/K
	1A-noEA	vs.	1A-R/A	0.001	1A-noEA < 1A-R/A
	1A-noEA	vs.	1A-R/K	0.371	n.s.
	1A-R/A	vs.	1A-R/K	0.004	1A-R/A > 1A-R/K
DNA content in cell layer	Control	vs.	1A	< 0.001	Control < 1A
	Control	vs.	1A-noEA	< 0.001	Control < 1A-noEA
	Control	vs.	1A-R/A	< 0.001	Control < 1A-R/A
	Control	vs.	1A-R/K	< 0.001	Control < 1A-R/K
	1A	vs.	1A-noEA	0.085	n.s.
	1A	vs.	1A-R/A	0.286	n.s.
	1A	vs.	1A-R/K	0.322	n.s.
	1A-noEA	vs.	1A-R/A	0.03	1A-noEA < 1A-R/A
	1A-noEA	vs.	1A-R/K	0.338	n.s.
	1A-R/A	vs.	1A-R/K	0.089	n.s.

n.s.: no significant difference.