

# FGF Family

Fibroblast Growth Factors	MW-Secreted form (mouse)	Estimated <i>pI</i> (mouse)	Target Cells (Partial List)	Receptors	Functions (Partial List)
<b>FGF1 (Acidic FGF)</b> Heparin-Binding Growth Factor-1 (HBGF-1) ECGF-beta (Endothelial Cell Growth Factor-beta)	15.8 kDa (15.7 kDa)	7.99 (7.88)	mesenchymal, neuroectodermal endothelial cells	all FGF receptors	Angiogenic <i>in vivo</i> , mitogenic <i>in vitro</i> , wound healing
<b>FGF2 (Basic FGF)</b> Heparin-Binding Growth Factor-2 (HBGF-2) Prostatropin	17.2 kDa (17.1 kDa)	10.03 (9.59)	mesenchymal, neuroectodermal endothelial cells	1b, 1c, 2c, 3c, 4	Vasculogenesis, wound healing, angiogenesis, hematopoiesis, neuron survival
<b>FGF3</b> int-2	24.9 kDa (25.2 kDa)	10.98 (10.84)	epithelial cells that express FGF receptor 2b	2b	Mesoderm induction, angiogenesis, inner ear development
<b>FGF4</b> Heparin Secretory Transforming protein (HST-1) Transforming protein KS3 Heparin-Binding Growth Factor-4 (HBGF-4)	19.7 kDa (18.9 kDa)	10.22 (10.24)	cells that express FGF receptors	1c, 2c, 3c, 4	Angiogenesis, vertebrate limb development and development of stomach cancer
<b>FGF5</b> Heparin-Binding Growth Factor-5 (HBGF-5) Smag-82	27.6 kDa (27.1 kDa)	11.1 (10.50)	cells that express FGF receptors	1c, 2c	Hair growth and development
<b>FGF6</b> Heparin-Binding Growth Factor-6 (HBGF-6) HST-2	18.7 kDa (18.9 kDa)	10.09 (9.80)	cells that express FGF receptors	1c, 2c, 4	Skeletal muscle development
<b>FGF7/KGF</b> (Keratinocyte Growth Factor) HST-6 Heparin-Binding Growth Factor-7 (HBGF-7)	18.9 kDa (18.8 kDa)	9.55 (9.22)	keratinocytes and epithelial cells that express FGF receptor 2b	2b	Keratinocyte growth factor, kidney and lung development, angiogenesis and wound healing
<b>FGF8</b> Androgen-Induced Growth Factor (AIGF) Heparin-Binding Growth Factor-8 (HBGF-8)	22.4 kDa (28.0 kDa)	10.95 (10.46)	mammary carcinoma cells and other cells that express FGF receptors	2c, 3c, 4 (possibly 1c)	Limb, central nervous system, cardiac outflow tract development
<b>FGF9</b> Glia Activating Factor (GAF) Heparin-Binding Growth Factor-9 (HBGF-9)	23.4 kDa (23.3 kDa)	7.44 (7.44)	glial cells, astrocyte cells and other cells that express FGF receptors	1c, 2c, 3b, 3c, 4	Glia-activating factor, motor neuron survival, lung and testes development
<b>FGF10</b> FGFA Keratinocyte growth factor-2	19.3 kDa (19.5 kDa)	10.49 (9.76)	epithelial cells that express FGF receptor 2b	2b	Wound healing, multi-organ including limb and lung development
<b>FGF11</b> FGFB Fibroblast growth Factor Homologous Factor-3 (FHF-3)	25.0 kDa (25.1 kDa)	9.92 (10.06)	nuclear processes unrelated to the secreted FGFs	none	Appears to be involved in nervous system development and function
<b>FGF12</b> FGFC Fibroblast growth factor Homologous Factor-1 (FHF-1)	27.4 kDa (27.3 kDa)	9.98 (9.98)	nuclear processes unrelated to the secreted FGFs	none	Appears to be involved in nervous system development and function
<b>FGF13</b> FGFD Fibroblast growth Factor Homologous Factor-2 (FHF-2)	27.5 kDa (27.6 kDa)	9.92 (9.92)	nuclear processes unrelated to the secreted FGFs	none	Appears to be involved in nervous system development and function
<b>FGF14</b> FGFE Fibroblast growth factor Homologous Factor-4 (FHF-4)	27.7 kDa (27.7 kDa)	10.11 (10.11)	nuclear processes unrelated to the secreted FGFs	none	Regulates central nervous system development and function
<b>FGF15</b> FGFF, identified in mouse not human	(22.5 kDa)	(5.76)	cells that express FGF receptor 4	4	Regulator of cell division and patterning in specific regions of embryonic brain, spinal cord and sensory organs
<b>FGF16</b> FGFG	23.7 kDa (23.7 kDa)	9.52 (9.36)	cells that express FGF receptors	2c, 3c	Central nervous system development
<b>FGF17</b> FGFH	22.7 kDa (22.5 kDa)	11.22 (10.71)	cells that express FGF receptors	1c, 2c, 3c, 4	Signals induction and patterning of embryonic brain
<b>FGF18</b> zFGF5 FGFI	20.1 kDa (20.9 kDa)	10.67 (10.09)	cells that express FGF receptors	1c, 2c, 3c, 4	An essential regulator of long bone and calvarial development
<b>FGF19</b> and FGJ, identified in human not mouse	21.8 kDa	6.32	cells that express FGF receptor 4	4	Expressed during brain development and during embryogenesis, regulates multiple metabolic processes in adulthood
<b>FGF20</b> FGFK	23.2 kDa (23.6 kDa)	9.22 (8.54)	epithelial and mesenchymal cells	1c, 2c, 3c	Expressed during limb and brain development
<b>FGF21</b> FGFL	19.4 kDa (19.9 kDa)	5.29 (4.59)	unknown at the time of printing	unknown at the time of printing	Expressed in liver and thymus, may play a role in Type 2 Diabetes
<b>FGF22</b> FGFM	17.1 kDa (16.5 kDa)	11.71 (11.58)	hair follicle keratinocytes	unknown at the time of printing	May be involved in cutaneous development and repair, and hair development
<b>FGF23</b> FGFN	25.3 kDa (25.3 kDa)	8.95 (9.64)	renal proxima epithelial cells	3c	Expressed in brain and thymus, regulates phosphate homeostasis, mutant in hypophosphatemic rickets, regulates multiple metabolic processes in adulthood