

■ Signal sequence   
 ■ TIG-2 prodomain   
 ■ TIG-3 prodomain   
 ■ Cys intrachain disulfide  
■ TIG-2 mature domain   
 ■ TIG-3 mature domain   
 ■ Lys (replaces dimerization Cys)

**A**

>TIG-2

1 MLFEFSILLGFLVPRGDSKGIIYFVEERNKTYTQPLTGQATDKIGEQIRE

51 LFNIDINPNGPAVKANNVSTYMKRLYKQLENYEHGENHNEEVNAWLSA

101 DRIVSHMAQEVSHRLDDGSYSIRFAKEHVPAKEGQSIVRAQLRIHQIV

151 SPVFFYIEDTNLPGDITLVSSDDPTVVTDVTMVDWRWSHLQLSTLPIVTA

201 RASTNDELKIEAFLVIALKDEADAGPPKKRSRRSASTTPISAPPMRQKVKR

251 SESAYFEKPNENERQQRKGLYVDFDILGWKQWVIAPEGFSAFYQSGDQSA

301 PFSKEMNATSHAIVQSTLHRVRPNSTTPAKQAPSSLGSYKILFVDQNKQV

351 QIKRYRDMVVDEQGH

>TIG-3, isoform B

1 MHFFTRFHYCFVITIISINASSLSIERQKRQLLSALNLSRRPPLIHQAPV

51 IPDSMSTRKHDLYGGVLDKITLEPNRKSWTQLTPESLVKDQFOYSINSI

101 NHEILSASLIIDPKDTNISIVVYEVDELFGELQYVDRFEIRETLDKYHFD

151 ISHLFHKWMKQKSSDKMKIEITNSNTQNVINALSVLRNAPNFDVMVFQP

201 NTVTAGTSDQVGVIPFYVNFTEIGWNDWILSPPGFYANVSDTVQSTE

251 SDEVYQFMKAAISDLPEPQAPNYYGSVDMIVALSPRDIRKTRVHGLRAL

301 SSSIT

**B**

Protein	Subfamily <sup>a</sup>	Species	Uniprot Entry	Signal Sequence <sup>b</sup>	(Prodomain $\supset$ Cleavage Site)	Mature Domain
TIG-2	BMP	<i>C. elegans</i>	O16273	MLFEFSILLGFLVPRGDS	...PMRQ	KVKR <sup>c</sup> SESA...
TIG-3	Activin	<i>C. elegans</i>	A0A8S4QGI4	MHFFTRFHYCFVITIISINASS	...INAL	SVLR <sup>a</sup> NAPN...
BMP-2	BMP	<i>H. sapiens</i>	P12643	MVAGTRCLLALLLPQVLLGGAAG	...PLHK	REKR <sup>d</sup> QAKH...
BMP-6	BMP	<i>H. sapiens</i>	P22004	MPGLGRRAQWLCWWGLLCS	...RQQS	R <sup>d</sup> NRST...
BMP-15	BMP	<i>H. sapiens</i>	O95972	MVLLSILRILFLCELVLFMEHRAQM	...ESLL	RRTR <sup>d</sup> QADG...
GDF-9	BMP	<i>H. sapiens</i>	O60383	MARPKNFLLWFCCFAWLCFPISLG	...SSHH	RHRR <sup>d</sup> GQET...
Inh- $\beta$ A	Activin	<i>H. sapiens</i>	P08476	MPLLWLRGFLASCWIIIVRS	...HPRH	RRRR <sup>d</sup> GLEC...
Inh- $\beta$ B	Activin	<i>H. sapiens</i>	P09529	MDGLPGRALGAACLLLLAAGWLGPEAW	...HRIR	KR <sup>d</sup> GLEC...
Inh- $\alpha$	TGF- $\beta$	<i>H. sapiens</i>	P05111	MVLHLLLFLLLTPQGGHS	...SGGE	RARR <sup>d</sup> STPL...