

a.

	Box 1	Box 2	SR
hsGP130	VLFCFNKRDLIKKHIWPNVDPSPKSHIAQWSPHTPPRHNFNSKQDMYSDGNFTDVSVEIEANDKKPFPEDLKS LDFKKKEKINTEGHSSGIGGSSCMSS		100
mmGp130	VLFCFNKRDLIKKHIWPNVDPSPKSHIAQWSPHTPPRHNFNSKQDMYSDGNFTDVSVEIEANNKKPCPDDLKSVDLFFKKEKVSIEGHSSGIGGSSCMSS		100
drgp130	IMLCRLKREVIKLLWPQVDPSPDSSIAHWSL-----DFPVKTEMPKE-----DVSVEVDVDFDGKSLCEEDKVVLPLKKDKYLSEEHSSGIGGSSCMSS		90
	1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100		
	Box 3	Internalization	
hsGP130	SRPSISSDENESSQNTSSTVQYSTVVHSGYRHQVPSVQ--VFSRSESTQPLLDSEERPDLQLVDHVDGGDILPRQQYFKQNCQSQHESSPDISHFERS		198
mmGp130	SRPSISSNEENESAQSTASTVEYSTVVHSGYRHQVPSVQ--VFSRSESTQPLLDSEERPDLQLVDHVDGGDILPRQPYFKQNCQSQPEACEISHFERS		198
drgp130	PRHSVSDSDEGDSGQTASTVQYSSSVASGYKGQTPNHQPPTFARSESTQPLLDCEEHPEN-----HPGE-----RNSYFRR-----GRE		165
	110.....120.....130.....140.....150.....160.....170.....180.....190.....200		
	SHP-2/ Stat3		
	SOCS3		
hsGP130	KQVSSVNEEDFVRLK-QQISDHISQSCGSGQMKMFQEVSAADAFPGPTEGQVERFETVGMEAAATDEGMPKSYLPQTVRQGGYMPQ		282
mmGp130	NQVLSGNEEDFVRLKQQQVSDHISQPYGSEQRRLLFQEGSTADALGTGADGQMERFESVGMETTIDEIIPKSYLPQTVRQGGYMPQ		283
drgp130	LEPQSIDEPVFSAVQEEEA-----PVVDDAPALSYMPQ-----QSGYRPQ		206
	210.....220.....230.....240.....250.....260.....270.....280.....		
		Stat3 Stat3	

b.

	Box 1	Box 2	
hsLIFR	TSILCYRKREWIKETFPDIPNPENCKALQFQ-----KSVCEGSSALKTLEMPNCTPNNVEVLETRSAPFKIEDTEIISPVAERPEDRSDAEPEN		90
mmLifr	TSILCYRKREWIKETFPDIPNPENCKALQFQ-----KSVCEGSNALKTLEMPNCTPNNVEVLESRSIVPKIEDTEIISPVAERPGERSEVDPEN		90
hsOSMR	IMVMCYLKSQWIKETCYPDIPDPYKSSILSLI-----K--FKENPHLIIMNVSDCIPDAIEVVS-----KPEGTKIQFLGTR		70
mmOsmr	SIIVCYWKSQWVKEKCYPDIPNPYKSSILSLI-----K--SKKNPHL-IMNVKDCIPDVLEVIN-----KAEGSKTQCVGSG		69
drliifr.a	ISICCYKKRAWVKAFYPEIPGP-----KVPGNWSSPQGPLDMKPSPHSLVQIVESPEWDITKESLVSVPPEEENENMEVDITDSDE		81
drliifr.b	ITVLCYRKREWLKDLLYPDIPEPKLAGKWTQGIYCTQMTGEGYVKCIEQEVHSGSDHPTSENPHGLDHHCSKKPLFPAQPLYNTTFPCAKLKTSIENPS		100
	1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100		
	Box 3		
hsLIFR	HVVVSICYCPPIIEEIPNPADEAGGTAQVIYIDVQSMYQPAKPEEEQENDPVGGAGYKPMHLPINSTVEDIAAEEEDLDK--TAGYRPQANVTNWLVS		188
mmLifr	HVVVSICYCPPIIEEITNPADEVGGAQVVYIDVQSMYQPAKAEEEQDVPVVGAGYKPMHLPISPAVEDTAAEEDEEGK--TAGYRPQANVTNWLVS		188
hsOSMR	KSLTETELTKPNYLYLLPTEKNHSGPGPCICFEN-LTYNQAASDSGSGHVPVSPKAPS--MLGLMTSPENVLKALEKNYMN--SLGEIPAGETSLNIVSQ		166
mmOsmr	KLHIEDVPTKP---PIVPTKEDSSGPGVPCIFEN-FTYDQSAFDSGSHGLIPGPLKDTAHQLGLLAPPNKFQNVVLKNDYMK--PLVESPTTEETSLIYVSQ		163
drliifr.a	PALLKYYNQVVHGHGSRNQISDSSGSS-TASVDSTQTEITYAGIQSPTSSQGAHSGGYRPMQPSSENPDPEQDQLDEDDDDGLNTGYKPCQS--WQMDS		177
drliifr.b	YNLTTPGPVDVQTSKPLLEMQDSYLPASKFAQPVCHSEQDSYLPAPKFKVQPLPIAVEDTYIFAPTSKGTTPIHVEDTYLPAPKFGQAPS IHVEDIHLPA		200
	110.....120.....130.....140.....150.....160.....170.....180.....190.....200		
		Stat3	
hsLIFR	PDSPRSDSNSEIVS--FGSPCSINSRQFLIPPKDEDSPKSNGGGWSFTNFFQNKPNP----	244	
mmLifr	PDSPRSTDNNNEVVS--FGSPCSINSRQFLIPPKDEDSPKSNGGGWSFTNFFQNKPNP----	244	
hsOSMR	LASPMFGDKDSLPTNVEAPHCEYKMQMAVSLRLALPPPTENSSSLITLLDPGEHYC----	225	
mmOsmr	LASPMCGDKDTLATEPPVPVHSGSEYKRMQMVVPGSLASPSLKEDNSLTSTVLLGQGEQ----	220	
drliifr.a	PEAENFSGS-----LGSPTISITSSQFLIPESSEEKQSSSS--WFHSFLSGKS	223	
drliifr.b	PKSQQFSLIVEDTY--LPAPKFPQPSNNLVQDSYLPAPKFIQPNFAQNNVIDKNTAGKPKQSA	261	
	210.....220.....230.....240.....250.....260...		

c.

	Box 1	
hsIL-7Rα	SILSFFSVALLVILACVLWKKRIKPIVWPSLPDHKKKTLEHLCKKPKRKNLVSNFNPESFLDCQIHRVDDIQARDEVEGFLQDTFFPQQLEESEKQRLGGDVQ	100
mmIL-7Rα	TILSLFSVLLVILAHVLWKKRIKPIVWVPSLPDHKKKTLEQLCKKPKTSLNVSFPIEFLDCQIHEVKGVEARDEVEIFLNDLPAQPEELETQGHRAAVH	100
dril-7Rα	---LTIILVLIISLIALRWRTQIKKYITPNIPHKATLAQMQR-AKEGLPFTFSPEIFSDAFIHRVDYVDEK-----PSAPELQDELRYSSSSA	85
	1.....10.....20.....30.....40.....50.....60.....70.....80.....90.....100	
hsIL-7Rα	SPNCPSDEVVITPESFGRDSSLTCLAGNVSACDAPILSSSRSLDCRESGKNGPHVYQDLLLSLGTNTS--TLPPPFSLQSGILTLPVAGQGPILTSLGS	198
mmIL-7Rα	SANRSPETSVSPPETVRRESPLRCLARNLSTCNAPPLSSRSRSPDYRDGDRNRPPVYQDLLPNSGNTNVFVPVQPLPFQSGIL--IPFSQRQPISTSSVL	198
dril-7Rα	S---VSEMDMNADERLPREQ-----SHLKIRLLDESLEKEMEN-----SVSQGLKSPQLE	133
	110.....120.....130.....140.....150.....160.....170.....180.....190.....200	
hsIL-7Rα	NQEEAYVTMSSFFYNQ	214
mmIL-7Rα	NQEEAYVTMSSFFYNQ	214
dril-7Rα	CKEEAYVTMSSLFKTQ	149
	210.....	
	Stat5	