

## Narrative-based computational modelling of the Gp130/JAK/STAT signalling pathway

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id	description	react	alt
Receptors phosphorylation			
23	if gp130.typeI is dimer and gp130 is not bound then gp130 phospho on Y767;Y814;Y905;Y915	13	
24	if gp130.typeI is dimer and gp130 is not bound then gp130 dephospho on Y767;Y814;Y905;Y915	14	
25	if LIFR is dimer and LIFR is not bound then LIFR phospho on Y981;Y1001;Y1028	13	
26	if LIFR is dimer and LIFR is not bound then LIFR dephospho on Y981;Y1001;Y1028	14	
27	if gp130.typeII is dimer and gp130 is not bound then gp130 phospho on Y767;Y814;Y905;Y915	13	
28	if gp130.typeII is dimer and gp130 is not bound then gp130 dephospho on Y767;Y814;Y905;Y915	14	
29	if OSMR is dimer and OSMR is not bound then OSMR phospho on Y917;Y945	13	
30	if OSMR is dimer and OSMR is not bound then OSMR dephospho on Y917;Y945	14	
STAT3 binding			
31	if gp130.Y767 is phospho and STAT3 is in 3 and STAT3 is not dimer and gp130 is not bound and gp130.SOCS3 is not bound and STAT3.gp130 is not bound and STAT3.LIFR is not bound and STAT3.OSMR is not bound and STAT3.Y705 is not phospho then gp130 binds STAT3 on gp130	15	
32	if LIFR.Y981 is phospho and STAT3 is in 3 and STAT3 is not dimer and LIFR is not bound and LIFR.SOCS3 is not bound and STAT3.LIFR is not bound and STAT3.gp130 is not bound and STAT3.OSMR is not bound and STAT3.Y705 is not phospho then LIFR binds STAT3 on LIFR	15	
33	if OSMR.Y917 is phospho and STAT3 is in 3 and STAT3 is not dimer and OSMR is not bound and OSMR.SOCS3 is not bound and STAT3.OSMR is not bound and STAT3.gp130 is not bound and STAT3.LIFR is not bound and STAT3.Y705 is not phospho then OSMR binds STAT3 on OSMR	15	
34	if gp130.Y767 is phospho and STAT3 is in 3 and STAT3 is not dimer and gp130 is bound and gp130.SOCS3 is not bound and STAT3.gp130 is bound and STAT3.LIFR is not bound and STAT3.OSMR is not bound and STAT3.Y705 is not phospho then gp130 unbinds STAT3 on gp130	16	
35	if LIFR.Y981 is phospho and STAT3 is in 3 and STAT3 is not dimer and LIFR is bound and LIFR.SOCS3 is not bound and STAT3.LIFR is bound and STAT3.gp130 is not bound and STAT3.OSMR is not bound and STAT3.Y705 is not phospho then LIFR unbinds STAT3 on LIFR	16	
36	if OSMR.Y917 is phospho and STAT3 is in 3 and STAT3 is not dimer and OSMR is bound and OSMR.SOCS3 is not bound and STAT3.OSMR is bound and STAT3.gp130 is not bound and STAT3.LIFR is not bound and STAT3.Y705 is not phospho then OSMR unbinds STAT3 on OSMR	16	
STAT3 phosphorylation			
37	if STAT3.gp130 is bound then STAT3 phosphorylates on Y705	17	
38	if STAT3.LIFR is bound then STAT3 phosphorylates on Y705	17	
39	if STAT3.OSMR is bound then STAT3 phosphorylates on Y705	17	
40	if STAT3 is in 3 then STAT3 dephosphorylates on Y705	18	