

Supplemental Figure 1. Partial alignment of the DNA binding region in select members of the RHD superfamily.

NFκB (<i>Nematostella</i>)	[ABU48530]	50 LEILEQPKPRGFRFRYP SE G 69	
		50 LEILEQPKPRGFRFRYP CE G 69	
NFκB			
NFκB (<i>Amphimedon</i>)	[ABW76682.1]	48 LEIVEQPKSRGFRFRYD CE G	67
NFκB (<i>Ciona</i>)	[NP_001071772.1]	26 LEIIEENPKSRGFRFRY TCE G	45
NFκB (<i>Strongylocentrotus</i>)	[NP_999819.1]	62 LKILEQPRQ R GFRFRY GCE G	81
NFκB (<i>Pinctada</i>)	[ABL63469.1]	102 TEIMEQPKQ R GLRFRY ECE G	121
NFκB (<i>Euprymna</i>)	[AAZ27981.1]	48 VVITEQPKSRGFRFRY QCE G	65
NFκB1 (<i>Homo</i>)	[NM_003998.2]	45 LQILEQPKQ R GFRFRY VCE G	64
NFκB1 (<i>Macaca</i>)	[XP_001109277.1]	45 LQILEQPKQ R GFRFRY VCE G	64
NFκB1 (<i>Mus</i>)	[EDL12142.1]	42 LQILEQPKQ R GFRFRY VCE G	61
NFκB1 (<i>Rattus</i>)	[EDL82271.1]	42 LQILEQPKQ R GFRFRY VCE G	61
NFκB1 (<i>Equus</i>)	[XM_001915438.1]	43 LQILEQPKQ R GFRFRY VCE G	62
NFκB1 (<i>Bos</i>)	[AAI53233]	44 LQILEQPKQ R GFRFRY VCE G	63
NFκB1 (<i>Sus</i>)	[ABU63584.1]	44 LQILEQPKQ R GFRFRY VCE G	63
NFκB1 (<i>Canis</i>)	[NP_001003344.1]	44 LQILEQPKQ R GFRFRY VCE G	63
NFκB1 (<i>Monodelphis</i>)	[XP_001368747.1]	28 LQILEQPKQ R GFRFRY VCE G	47
NFκB1 (<i>Gallus</i>)	[AAB58343.1]	70 LQIIEQPKQ R GFRFRY VCE G	89
NFκB1 (<i>Danio</i>)	[AAZ67903.1]	49 LQITEQPKQ R GFRFRY GCE G	68
NFκB2 (<i>Homo</i>)	[EAW49703.1]	40 LVIVEQPKQ R GFRFRY GCE G	59
NFκB2 (<i>Macaca</i>)	[XP_001104566.1]	40 LVIVEQPKQ R GFRFRY GCE G	59
NFκB2 (<i>Mus</i>)	[AAZ44753.1]	40 LVIVEQPKQ R GFRFRY GCE G	59
NFκB2 (<i>Rattus</i>)	[NP_001008350.1]	40 LVIVEQPKQ R GFRFRY GCE G	59
NFκB2 (<i>Equus</i>)	[XP_001916453.1]	40 LVIVEQPKQ R GFRFRY GCE G	59
NFκB2 (<i>Bos</i>)	[NP_001095571.1]	40 LVIVEQPKQ R GFRFRY GCE G	59
NFκB2 (<i>Sus</i>)	[XP_001925739.1]	40 LVIVEQPKQ R GFRFRY GCE G	59
NFκB2 (<i>Canis</i>)	[XP_543988.2]	40 LVIVEQPKQ R GFRFRY GCE G	59
NFκB2 (<i>Monodelphis</i>)	[XP_001379024.1]	44 LVIVEQPKQ R GFRFRY GCE G	63
NFκB2 (<i>Gallus</i>)	[P98150.1]	39 LVIIEQPKQ R GFRFRY VCE G	58
NFκB2 (<i>Xenopus</i>)	[AAH76882.1]	45 LSIIEQPKQ R GFRFRY VCE G	64
NFκB2 (<i>Danio</i>)	[NP_001001840.2]	55 IQIIEEPKQ R GFRFRY ECE G	74
REL			
Rel2 (<i>Crassostrea</i>)	[AAK72691.1]	85 VEIVEQPKQ R GLRFRY ECE G	104
RelA (<i>Ciona</i>)	[AAV80379.1]	7 LEIVEQPKQ R GMRFRY ECE G	26
Rel (<i>Halocynthia</i>)	[BAB47173.1]	15 LVITEQPKQ R GMRFRY ECE G	34
Rel (<i>Homo</i>)	[CAA52954.1]	10 IEIIEQPRQ R GMRFRY KCE G	29
Rel (<i>Pan</i>)	[ABM54265.1]	8 IEIIEQPRQ R GMRFRY KCE G	27
Rel (<i>Mus</i>)	[CAA33843.1]	10 VEIIEQPRQ R GMRFRY KCE G	29
Rel (<i>Gallus</i>)	[XP_419277.2]	9 IEIFEQPRQ R GMRFRY KCE G	28
Rel (<i>Danio</i>)	[AAO26402.1]	20 VQIFEQPKQ R GMRFRY KCE G	39
RelA (<i>Homo</i>)	[BAG64344.1]	21 VEIIEQPKQ R GMRFRY KCE G	40
RelA (<i>Pan</i>)	[ABM91918.1]	21 VEIIEQPKQ R GMRFRY KCE G	40
RelA (<i>Mus</i>)	[AAZ44745.1]	21 VEIIEQPKQ R GMRFRY KCE G	40
RelA (<i>Equus</i>)	[XP_001490867.2]	21 VEIIEQPKQ R GMRFRY KCE G	40
Rel? (<i>Monodelphis</i>)	[XP_001379658.1]	15 VEIIEQPKQ R GMRFRY KCE G	34
RelA-a (<i>Xenopus</i>)	[AAH70711.1]	19 VEIIEQPKQ R GMRFRY KCE G	38
RelA (<i>Danio</i>)	[AAI62910.1]	20 VEIIEQPKSRGMRFRY KCE G	39

Supplemental Figure 1. (continued)

RelB (<i>Homo</i>)	[BAF83283.1]	127	LVITEQPKQKQGMRFRYE CEG	146
RelB (<i>Pan</i>)	[XP 512742.2]	127	LVITEQPKQKQGMRFRYE CEG	146
RelB (<i>Mus</i>)	[EDL23169.1]	143	LVITEQPKQKQGMRFRYE CEG	162
RelB (<i>Equus</i>)	[XP 001917013.1]	145	LVISEQPKQKQGMRFRYE CEG	164
RelB-a (<i>Xenopus</i>)	[NP 001079335.1]	80	LNITEQPKQKQGMRFRYQ CEG	99
RelB (<i>Danio</i>)				
DIF /DORSAL				
Dif (<i>Drosophila</i>)	[AAM48404.1]	80	LRIVEEPTSNIIRFRYK CEG	99
Dorsal (<i>Drosophila</i>)	[AAT94434.1]	49	VKITEQPAGKALRFRYE CEG	68
Dorsal (<i>Tribolium</i>)	[AAG22858.1]	65	VKIIEQPASKALRFRYE CEG	83
Gambif1 (<i>Anopheles</i>)	[XP 310177.3]	50	VEITEQPHPKALRFRYE CEG	69
RELISH				
Relish (<i>Drosophila</i>)	[AAF20134.1]	87	LRIVEQPVEK-FRFRYK SEM	105
Relish (<i>Tribolium</i>)	[XP 970894.1]	1	LRIIEQPIDR-FRFRYK SEM	79
Relish (<i>Aedes</i>)	[XP 001658517.1]	135	LTIVEQPVDK-FRFRYQ SEM	153
NFAT				
NFAT (<i>Nematostella</i>)	[XP 001632550.1]	519	LVLLEEPEEN-YRARYESEG	537
NFAT (<i>Drosophila</i>)	[NP 001096974.1]	504	LEILSQPEQQ-HRARYQ TEG	522
NFAT (<i>Ciona</i>)	[XP 002120942.1]	348	LSIVNQPEPQ-HRARYL TEG	366
NFAT (<i>Strongylocentrotus</i>)	[XP 001177692.1]	230	IHITVQPEKH-HRARYR TEG	248
NFAT1 (<i>Homo</i>)	[ACG55586.1]	415	LRIEVQPKSH-HRAHYE TEG	433
NFAT1 (<i>Xenopus</i>)	[NP 001072740.1]	417	LRIEVQPKSH-HRAHYE TEG	435
NFAT1 (<i>Danio</i>)	[NP 001038624.1]	369	LQIDVQPKSH-HRAHYE TEG	387
NFAT1 (<i>Gallus</i>)	[XP 418906.2]	413	LRIEVQPKSH-HRAHYE TEG	431
NFAT2 (<i>Homo</i>)	[ACG55599.1]	191	LRIEVQPKPH-HRAHYE TEG	209
NFAT2 (<i>Gallus</i>)	[XP 417509.2]	410	LRIEVQPKPH-HRAHYE TEG	428
NFAT2 (<i>Danio</i>)	[XP 700591.3]	337	LRIEAQPRQH-HRAHYE TEG	355
NFAT3 (<i>Homo</i>)	[BAF83059.1]	438	LKIEVQPKTH-HRAHYE TEG	451
NFAT3 (<i>Gallus</i>)	[XP 414078.2]	555	LKIEVQPKTH-HRAHYE TEG	573
NFAT3 (<i>Danio</i>)	[XP 690273.3]	443	LKIEVQPKAH-HRAHYE TEG	461
NFAT4 (<i>Homo</i>)	[ACG55669.1]	349	LRIEVQPRAH-HRAHYE TEG	367
NFAT4 (<i>Danio</i>)	[XP 690183.2]	270	LRIEVQPRPH-HRAHYE TEG	288
NFAT5 (<i>Homo</i>)	[NP 619727.2]	300	LKIVVQPETQ-HRARYL TEG	318
NFAT5 (<i>Monodelphis</i>)	[XP 001378219.1]	510	LKIVVQPETQ-HRARYL TEG	528
NFAT5 (<i>Gallus</i>)	[BAG70407.2]	206	LKIVVQPETQ-HRARYL TEG	224
NFAT5 (<i>Danio</i>)	[NP 956189.1]	268	LKILVQPETQ-HRARYL TEG	286