

tll

3R nuclear receptor

Dper	MQS A EGSPDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dpse	MQS A EGSPDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dgri	MQSSEGSFDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dvir	MQSSEGSFDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dmoj	MQSSEGSFDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dwil	MQ M SEGSFDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dmel	MQSSEGSFDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dsim	MQSSEGSFDMMDQKYNSVRLSP P ASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dyak	MQSSEGSFDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dere	MQSSEGSFDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50
Dana	MQSSEGSFDMMDQKYNSVRLSPAASSRI LYHVPCKVCRDHSSGKHYGI YA	50

Dper	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dpse	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dgri	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dvir	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dmoj	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dwil	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCF V VG	100
Dmel	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dsim	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dyak	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dere	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100
Dana	CDGCAGFFKRSI RRSRQYVCKSQKQGLCVVDKTHRNQCACRL RKCFE VG	100

tII

3R nuclear receptor

Dper	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAGEMPQIPPEILMNTAALNG	150
Dpse	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAGEMPQIPPEILMNTAALNG	150
Dgri	MNKDAVQHERGPRNSTLRRHMAMYKDAMLGA-ELPQIPPEILMNTAALNG	149
Dvir	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAAEMPQIPPEILMNTAALTG	150
Dmoj	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAAEMPQIPPEILMNTAALTG	150
Dwil	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAGEMPQIPTEILMNTAALTG	150
Dmel	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAGEMPQIPAEILMNTAALTG	150
Dsim	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAGEMPQIPAEILMNTAALTG	150
Dyak	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAGEMPQIPAEILMNTAALTG	150
Dere	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAGEMPQIPAEILMNTAALTG	150
Dana	MNKDAVQHERGPRNSTLRRHMAMYKDAMMGAGEMPQIPAEILMNTAALTG	150

Dper	FPGLPMPIPGVQRPHHHAGHPGHPAL- - -SAAFQTPAAVLDL SVPRVPHH	197
Dpse	FPGLPMPIPGVQRPHHHAGHPGHPAL- - -SAAFQTPAAVLDL SVPRVPHH	197
Dgri	FPGLPMPMPGHQRGPHHPQLPGFP- - - - -APSAAAVL DL SVPRVPHH	192
Dvir	FPGLPMPMPGVQRSHHHAAALS- - - - -AAFQPPPSAAVL DL SVPRVPHH	193
Dmoj	FPGLPMPIPGVQRGHHHGAALS- - - - -AAFQPPPPAAVLDL SVPRVPHH	193
Dwil	FPGVPMPIPGVQRPHPTHPALNGGFQSPA AAAA AAAAAVLDL SVPRVPHH	200
Dmel	FPGVPMMPGLPQRAG- - -HHPAHMAAF- - QPPPSAAAVL DL SVPRVPHH	195
Dsim	FPGVPMMPGLPQRAG- - -HHPAHMAAF- - QPPPSAAAVL DL SVPRVPHH	195
Dyak	FPGVPMMPGLPQRAG- - -HHPGHMAAF- - QPPPSAAAVL DL SVPRVPHH	195
Dere	FPGVPMMPGLPQRAG- - -HHPGHMAAF- - QPPPSAAAVL DL SVPRVPHH	195
Dana	FPGVPMPI PGLPQRPPP PPHHHAAAFQ- - PPPPTAAAVL DL SVPRVPHH	198

tII

3R nuclear receptor

Dper	P	G	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	246	
Dpse	P	G	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	246	
Dgri	G	-	-	-	-	-	-	-	-	H	H	G	F	F	L	P	S	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	237	
Dvir	P	V	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	242	
Dmoj	P	V	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	242	
Dwil	P	V	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	249	
Dmel	P	V	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	244	
Dsim	P	V	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	244	
Dyak	P	V	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	244	
Dere	P	V	H	Q	G	-	-	-	-	H	H	G	F	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	244	
Dana	P	V	H	Q	G	H	H	A	-	H	H	A	-	-	F	S	P	T	A	A	Y	M	N	A	L	A	T	R	A	L	P	P	T	P	P	L	M	A	A	E	H	I	K	E	T	A	A	E	H	L	F	K	N	V	248

mel: 244-389 Ligand binding domain (by similarity)

Dper	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	M	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	296
Dpse	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	M	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	296
Dgri	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	L	L	E	E	S	W	K	E	F	F	I	L	A	M	S	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	287
Dvir	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	L	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	292
Dmoj	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	L	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	292
Dwil	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	M	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	S	Q	L	L	F	V	Y	E	299
Dmel	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	L	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	294
Dsim	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	L	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	294
Dyak	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	L	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	294
Dere	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	L	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	294
Dana	N	W	I	K	S	V	R	A	F	T	E	L	P	M	P	D	Q	L	M	L	E	E	S	W	K	E	F	F	I	L	A	M	A	Q	Y	L	M	P	M	N	F	A	Q	L	L	F	V	Y	E	298

tII

3R nuclear receptor

Dper	AENNNREI VGMVSREVHAFQDVL NQL CHMNV DST EYECL RAI SL FRK SPP	346
Dpse	AENNNREI VGMVSREVHAFQDVL NQL CHMNV DST EYECL RAI SL FRK SPP	346
Dgri	AENANREI VAI VSREVHAFQDVL NQL CHL NI DT EYECL RAI SL FRK SPP	337
Dvir	SEANANREI VT I VAREVHAFQDVL NQL CHL NI DST EYECL RAI SL FRK SPP	342
Dmoj	SENSNRDI VSVVAREVHAFQDVL NQL CHL NI DST EYECL RAI SL FRK SPP	342
Dwil	SENSNREI VGI VAREVHAFQDVL NQL CH F NI DST EYECL RAI SL FRK SPP	349
Dmel	SEANANREI MGMVTREVHAFQEV L NQL CHL NI DST EYECL RAI SL FRK SPP	344
Dsim	SEANANREI MGMVTREVHAFQEV L NQL CHL NI DST EYECL RAI SL FRK SPP	344
Dyak	SEANANREI MGMVTREVHAFQEV L NQL CHL NI DST EYECL RAI SL FRK SPP	344
Dere	SEANANREI MGMVTREVHAFQEV L NQL CHL NI DST EYECL RAI SL FR N - - -	341
Dana	SEANANREI MGMVTREVHAFQDVL NQL CHL NI DST EYECL RAI SL FRK SPP	348

Dper	AASSTEDLANSSI LTGSGSPNSSASAESRGLLES G KVAAMHNDARSAL HN	396
Dpse	AASSTEDLANSSI LTGSGSPNSSASAESRGLLES G KVAAMHNDARSAL HN	396
Dgri	AASSTEDLANSSI LTGSGSPNSSASAESRGLLES SKVAG MHNDARNAL HN	387
Dvir	AASSTEDLANSSI LTGSGSPNSSASAESRGLLES SKVAA MHNDARNAL HN	392
Dmoj	AASSTEDLANSSI LTGSGSPNSSASAESRGLLES NKVAS MHNDARNAL HN	392
Dwil	AASSTEDLANSSI LTGSGSPNSSASAESRGLLES SKVAA MHNDARNAL HN	399
Dmel	SASSTEDLANSSI LTGSGSPNSSASAESRGLLES G KVAAMHNDARSAL HN	394
Dsim	SASSTEDLANSSI LTGSGSPNSSASAESRGLLES G KVAAMHNDARSAL HN	394
Dyak	SASSTEDLANSSI LTGSGSPNSSASAESKGLLES G KVAAMHNDARSAL HN	394
Dere	- - - - - SI LTGSGSPNSSASAESKGLLES G KVAAMHNDARSAL HN	380
Dana	AASSTEDLANSSI LTGSGSPNSSASAESKGLLES G KVAAMHNDARSAL HN	398

tII

3R nuclear receptor

Dper	YI SRTHPNQPLRFQTL LGVVSMMHKVSSFTI EELFFRKTIGDI TIVRLI S	446
Dpse	YI SRTHPNQPLRFQTL LGVVSMMHKVSSFTI EELFFRKTIGDI TIVRLI S	446
Dgri	YI SRTHPNQPLRFQTL LGVVS L MHKVSSFTI EELFFRKTIGDI TIVRLI S	437
Dvir	YI SRTHPNQPLRFQTL LGVVT L MHKVSSFTI EELFFRKTIGDI TIVRLI S	442
Dmoj	YI SRTHPNQPLRFQTL LGVVS L MHKVSSFTI EELFFRKTIGDI TIVRLI S	442
Dwil	YI SRTHPNQPLRFQTL LGVVS Q MHKVSSFTI EELFFRKTIGDI TIVRLI S	449
Dmel	YI Q RTHP S QP M RFQTL LGVV Q L MHKVSSFTI EELFFRKTIGDI TIVRLI S	444
Dsim	YI Q RTHP S QP M RFQTL LGVV Q L MHKVSSFTI EELFFRKTIGDI TIVRLI S	444
Dyak	YI Q RTHP T QP M RFQTL LGVV Q MMHKVSSFTI EELFFRKTIGDI TIVRLI S	444
Dere	YI Q RTHP A QP M RFQTL LGVV Q MMHKVSSFTI EELFFRKTIGDI TIVRLI S	430
Dana	YI Q RTHP A QPLRFQTL LGVV Q L MHKVSSFTI EELFFRKTIGDI TIVRLI S	448

Dper	DMYSQRKI	454
Dpse	DMYSQRKI	454
Dgri	DMYSQRKI	445
Dvir	DMYSQRKI	450
Dmoj	DMYSQRKI	450
Dwil	DMYSQRKI	457
Dmel	DMYSQRKI	452
Dsim	DMYSQRKI	452
Dyak	DMYSQRKI	452
Dere	DMYSQRKI	438
Dana	DMYSQRKI	456