

#NEXUS  
[!Created by MacVector on Oct 23 2006 at 11:47:53.]

BEGIN DATA;  
DIMENSIONS NTAX=19 NCHAR=164;  
FORMAT MISSING=X GAP=- INTERLEAVE DATATYPE=PROTEIN;

MATRIX

Xtrop_spred2	PSRCSRRK--DGERSRCIYCRDMFNHDENRRGQCQDAPDSVRNCIRRVS CMGFADCVLY	[58]
Homo_Spred2	PSRGKSRRRKEDGERSRCVYCRDMFNHEENRRGHCQDAPDSVRTCIRRVS CMWCADSMLY	[60]
NvSpry	-PKYITSLPTTKLVSGVAEEKSKWADEECETRASGKVC GFDSEEVVDYATCMCCVKGLFY	[59]
Spurp_spy2	PPKKLMQKMNKYTEPAQCLHCSQYFDPERSRKGDCPEAPDEASYCINFCTCLCAAQCMLY	[60]
Danio_spy4	-EKKKHVLLCEKCGKCRCTECLPR-TLPSCWVCNQECLCSAQNLVDSVTCMCLVKGVFY	[58]
Gallus_spy2	--LGAHSYRCEDCGKCKCKECTYPR-TLPSCWICDKQCLCSAQNVVDYGTCCVCCVKGLFY	[57]
Homo_Spy4	-ELDKHFLLCEACGKCKCKEASPR-TLPSCWVCNQECLCSAQTLVNYGTCMCLVQGFY	[58]
Xtrop_spy1	--YSQHRFICEQCGKCKCGDCTAPR-TLPSCWVCNQECLCSAQTLVNYGTCMCLVKATFY	[57]
homo_spy3	-HPSEHLFICEECGRCKCVPCTAAR-PLPSCWLCNQRLCSAESLLDYGTCLCCVKGLFY	[58]
Mus_spy2	--LGLHAYRCEDCGKCKCKECTYPR-PLPSDWICDKQCLCSAQNVVDYGTCCVCCVKGLFY	[57]
Homo_spy1	--LTQHKFICEQCGKCKCGECTAPR-TLPSCWVCNQECLCSAQNVVDYGTCCVCCVKGLFY	[57]
Danio_spy2	-PDGKHSILCEDCGRCKCEGCTCPR-TLPSCWMCGRRLCSATSAMDYVTCVCCVKCLFY	[58]
Xlaevis_spy2	--LDLHSLMCEDCGKCKCKECTYPR-TLPSCWICDKQCLCSAQEVVDYGTCCVCCVKCLFY	[57]
Mus_spy3	-HSSDHLFICEECGRCKCVPCTAVR-PLPSCWMCNQRLCSAESLLDYGTCLCCVKGLFY	[58]
Xtrop_spy2	--LGLHSLRCEDCGKCKCKECTYPR-TLPSCWICDKQCLCSAQEVVDYGTCCVCCVKCLFY	[57]
Drosophila_spy	DPSLLNPIVPCRCGRRCQCSQSPR-PLPQTWVCNKTCLCSAESVIDYASCLCCAKALFY	[59]
Mus_spy4	-ELDKHFLLCEACGKCKCKEASPR-TLPSCWVCNQECLCSAQTLVNYGTCMCLVQGFY	[58]
Homo_spy2	--LGLHAYRCEDCGKCKCKECTYPR-PLPSDWICDKQCLCSAQNVVDYGTCCVCCVKGLFY	[57]
Mus_spy1	--PTQHKFICEQCGKCKCGECTAPR-ALPSCWVCNQECLCSAQNVVDYGTCCVCCVKGLFY	[57]
Xtrop_spred2	HCMSDSE-GD-----YTD-ACSCDTSDEKFCRLRWMLLIPLSIIAPGMCCYLPLRACYN	[109]
Homo_Spred2	HCMSDPE-GD-----YTD-PCSCDTSDEKFCRLRWMLLIALSFLAPCMCCYLPLRACYH	[111]
NvSpry	HCTKDSEDEGS-----MADEPCSTGTP--ACVPRWGCLGLLALLMPCIWCYLPVAGCRK	[111]
Spurp_spy2	HCMSNSE-GD-----FPS-PCSCDTNESQFCRRWFGLAALSFIIVPCLWCYPPLKCCHW	[111]
Danio_spy4	HCTDEDEEGS-----CADKPCSCSHS--NCCARWSFMAAVSLVLPCLVLCYLPATGCAK	[109]
Gallus_spy2	HCSNDDE-DN-----CADNPCSCSQS--HCCTRWSAMGVVSLFLPCLWYLPKAGCLK	[107]
Homo_Spy4	HCTNEDDEGS-----CADHPCSCSRS--NCCARWSFMGALSVVLPCLLCYLPATGCVK	[109]
Xtrop_spy1	HCSNDDEGDS-----YADNPCSTQS--HCWSRYLCMGVMSFFLPCLLCYPPAKGCLK	[108]
homo_spy3	HCSTDDE-DN-----CADEPCSCGPS--SCFVRWAAMSLISLFLPCLCCYLPTRGCLH	[108]
Mus_spy2	HCSNDDE-DN-----CADNPCSCSQS--HCCTRWSAMGVMSLFLPCLWYLPKAGCLK	[107]
Homo_spy1	HCSNDDEGDS-----YSDNPCSCSQS--HCCSRYLCMGAMSLFLPCLLCYPPAKGCLK	[108]
Danio_spy2	HCSSDDE-DV-----CADKPFSTQS--HCCMRWSAISVLALFLPCLLCYLPKAGCVA	[108]
Xlaevis_spy2	HCSNDDE-DN-----CADNPCSCSQS--HCCTRWSAIGVMALFLPCLWYLPKAGCLK	[107]
Mus_spy3	HCSTDDE-DN-----CADEPCSCGPS--SCFIRWAAMSLISLFLPCLCCYLPTRGCLH	[108]
Xtrop_spy2	HCSNDDE-DN-----CADNPCSCSQS--HCCTRWSAIGVMALFLPCLWYLPKAGCLK	[107]
Drosophila_spy	HCARDNDLDCDDGNGTPCVDNPCSCGPY--KRTQRWGWLGALSIFLPLWYWPMPRGCMK	[117]
Mus_spy4	HCTNEDDEGS-----CADHPCSCSGS--NCCARWSFMGALSVVLPCLLCYLPATGCVK	[109]
Homo_spy2	HCSNDDE-DN-----CADNPCSCSQS--HCCTRWSAMGVMSLFLPCLWYLPKAGCLK	[107]
Mus_spy1	HCSNDDDGGS-----YSDNPCSCSQS--HCCSRYLCMGALSLCLPCLLCYPPAKGCLK	[108]
Xtrop_spred2	CGVMCGCCGGKHKAAAG-----	[125]
Homo_Spred2	CGVMCRCCGGKHKAAA-----	[127]
NvSpry	ACSSCKYKTRKQKRKEKLT-----	[132]
Spurp_spy2	LGTKCGCCGGRHKAK-----	[126]
Danio_spy4	LSQKCYDGVSRPGCRCKST-QSCKVAEIKACQ---PEKQAS---	[146]
Gallus_spy2	LCQGCYDRVNRPGCRCKHS-NTVCCKVPSVP---PRNFEKPT--	[145]
Homo_Spy4	LAQRGYDRLRRPGCRCKHT-NSVICKAASGDA---KTSRPDKPF	[149]
Xtrop_spy1	LCRECYDRVNRPGCRCKNS-NTVYCKLDDVP---RGQGKPS--	[145]
homo_spy3	LCQQGYDSLRRPGCRCKRHTNTVCRKISSGSAPFPKAQEK---	[149]
Mus_spy2	LCQGCYDRVNRPGCRCKNS-NTVCCKVPTVP---PRNFEKPT--	[145]

```
Homo_spy1      LCRRCYDWIHRPGCRCKNS-NTVYCKLESCPS---RGQGKPS-- [146]
Danio_spy2     LCQACYDCTSRPGCRCKN---KGVEK----- [131]
Xlaevis_spy2   LCQGCYDRVNRPGCQCKRS-NTVCLKVPHLQ---PRNLEKPT-- [145]
Mus_spy3       MCQQGYDSLRRPGCRCKRHTNTVCRKISSSSSPFKAQEKS--- [149]
Xtrop_spy2    LCQGCYDRVNRPGCRCKRS-NTVCLKVPHLQ---PRNLEKPT-- [145]
Drosophila_spy LCEKCYGRFAGRGCRGIGGGGAGSGGGVGSIGSTSSMLP--- [158]
Mus_spy4       LAQRGYDRLRRPGCRCKHT-NSVICKAASGDT---KTSRSDKPF [149]
Homo_spy2     LCQGCYDRVNRPGCRCKNS-NTVCKVPTVP---PRNFEKPT-- [145]
Mus_spy1      LCRGCYDWTHRPGCRCRNS-NTVYCKLESCPS---RAQGKLS-- [146]
```

```
;  
END;
```