

Supplemental Figure 1

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Nb Hxk1	MKKKATVGAVVVCTAAVCAVAALIVNHRMRKSSKWARARAILLRFEEKCGTPDAKLRQVADAMTVEMHAGLASEGGSKLKM	80
At HXK1	MCKVAVGATVVCCTAAVCAVAALIVRRRMRQSSGKWRVLAILLKAFEDCATPIISKLRQVADAMTVEMHAGLASEGGSKLKM	80
At HXK2	MCKVAVATTVVCSVAVCAAAALIVRRRMRKSSAGKWARVLEILLKAFEDCATPIIAKLRQVADAMTVEMHAGLASEGGSKLKM	80
Le Hxk2	MKKKATVGAVVVCTAAVCAVAALIVNHRMRKSSKWARARAILLRFEEKCGTPDAKLRQVADAMTVEMHAGLASEGGSKLKM	80
St HK1	MKKVTVGAVVVCAAAVCAVAALIVNHRMRKSSKWARARAILLRFEEKCGTPDAKLRQVADAMTVEMHAGLASEGGSSRC	80
St HK2	MKKKATVGAVVVCTAAVCAVAALIVNHRMRKSSKWARARAILLRFEEKCGTPDAKLRQVADAMTVEMHAGLASEGGSKLKM	80
So HxK1	MKKAAVGAVVVCTAAVCAAAALIVRRRMRKSSKWRVMAILLKELDDNCGTPIGLKLRQVADAMTVEMHAGLASEGASKLKM	80
Nb Hxk1	LITVYDNLPTGDEAGVFYALDLGGTNFRVLRVQLGGKGGGIIHOEFBAESIPPILMVGISEALFDYITAEALAKFVAESEE	160
At HXK1	LISYVDNLPSGDEKGLFYALDLGGTNFRVLRVQLGGKQERVVKQEFEEVSIPPILMTGGSDELNFNIAEALAKFVAESEE	160
At HXK2	LISYVDNLPSGDETCGFYALDLGGTNFRVLRVQLGGKHDRVVKREFKEESIPPILMTGKSHLELDFIVDVLAKFVAESEE	160
Le Hxk2	LISYVDNLPTGDEAGVFYALDLGGTNFRVLRVQLGGKGGGIIHOEFBAESIPPILMVGISEALFDYITAEALAKFVDESEE	160
St HK1	LISYVDNLPTGDEAGVFYALDLGGTNFRVLRVQLGGKGGGIIHOEFBAESIPPILMVGISEALFDYITAEALAKFVAESEE	160
St HK2	LISYVDNLPTGDEGGVFYALDLGGTNFRVLRVQLGGKGGGIIHOEFBAESIPPILMVGISEALFDYITAEALAKFVAESEE	160
So HxK1	LISYVDNLPTGDEHGLFYALDLGGTNFRVLRVQLGGKEKRVVEQEFDEVSIPPILMVGISEALFDYITAEALAKFVAESEE	160
Nb Hxk1	KFQPPGKQRELGFITFSPFMOTSI NSGTIMRWTKGFSIDDAVQODVVCELTKAMKRCVDMRVVSALVNDTVGTLAGGKY	240
At HXK1	DFHLPGRQRELGFITFSPFKQTSLS SSGSLIKWTGKFSIEEAVQODVVGALNKALERVGLDMRTAALVNDTVGTLAGGRY	240
At HXK2	DFHLPGRQRELGFITFSPFKQLSLS SSGTLLNWTGKFSIDDTVQKDVVCELVKAMERVGLDMRTAALVNDTVGTLAGGRY	240
Le Hxk2	KFHPPGKQRELGFITFSPFMOTSI NSGTILRWTKGFSIDDTVQKDVVCELTAMOKREIDMRVVSALVNDTVGTLAGGRF	240
St HK1	KFHPPGKQRELGFITFSPFMOTSI NSGTILRWTKGFSIDDAVQODVVCELTAMKKEKVLDMRVVSALVNDTVGTLAGGKY	240
St HK2	EFHPPGKQRELGFITFSPFMOTSI NSGTILRWTKGFSIDDTVQKDVVCELTAMOKREIDMRVVSALVNDTVGTLAGGRF	240
So HxK1	GLHPEGRQRELGFITFSPFKQTSLS SSGTLLNWTGKFNLEDDTVQEDVVAELTKAMLRKGVDMRVVSALVNDTVGTLAGGRY	240
NbHxk1	TINDVAVAVILGCTGTAAYVERVAQAI PKWHGPEPKSGEMVINMEWGNFRSSHLPLTEYDHALDNEISLNPGEQIFEKMTSG	320
At HXK1	YNPDVVAVAVILGCTGTAAYVERATAI PKWHGILLPKSGEMVINMEWGNFRSSHLPLTEFDHTLDFESLNPGEQIFEKTISSG	320
At HXK2	TNDVVAVAVILGCTGTAAYVERAHAIPKWHGILLPKSGEMVINMEWGNFRSSHLPLTEYDHSLDVDSLNPGEQIFEKTISSG	320
Le Hxk2	TDKDVSIAVILGCTGTAAYVERVAQAI PKWHGPEPKSGEMVINMEWGNFRSSHLPLTEYDHALDNEISLNPGEQIFEKTCSSG	320
St HK1	TOKDVAVAVILGCTGTAAYVERVAQAI PKWHGPEPKSGEMVINMEWGNFRSSHLPLTEYDHALDNEISLNPGEQIFEKMTSG	320
St HK2	TNKDVSIAVILGCTGTAAYVERVAQAI PKWHGPEPKSGEMVINMEWGNFRSSHLPLTEYDHALDNEISLNPGEQIFEKTCSSG	320
So HxK1	YKEDVIAVAVILGCTGTAAYVERASAIPKWHGPEPKSGEMVINMEWGNFRSSYLPTEYDHALDNEISLNPGEQIFEKMTSG	320
Nb Hxk1	MYLGEILRRVLRMADEAGIFGDEVPK-LKSPFVLRTPDMSAMHDTSSDLRVVGDCLKLDILEISNTSLKTRRLVVELC	399
At HXK1	MYLGEILRRVLRMADEAFAFGDTVPSK-LRIPFIRTPDMSAMHDTSSDLKIVGSKIKDILEVPTSLKMRKVVISLC	399
At HXK2	MYLGEILRRVLRMADEAFAFGDITVPSK-LRIPFIRTPDMSAMHDTSSDLKVVGSKIKDILEVPTSSLKMRKVVISLC	399
Le Hxk2	MYLGEILRRVLRMADEAGIFGEEVPPK-LKNSFILRTPDMSAMHDTSSDLRVVGDCLKLDILEISNTSLKTRRLVVELC	399
St HK1	MYLGEILRRVLRVAEIVLAFAMRSLQSLKDSFVLRTPDMSAMHDTSSDLKVVGEKLDILEISNTSLKTRRLVVELC	400
St HK2	MYLGEILRRVLRMADEAGIFGEEVPPK-LKNSFILRTPDMSAMHDTSSDLRVVGDCLKLDILEISNTSLKTRRLVVELC	399
So HxK1	MYLGEIVRRVLRMADEASLFGDTVPSK-LRTPFIRTPDMSAMHDTSSDLKVVASKLDVLCIPNSSLKTRKTIIVVC	399
Nb Hxk1	NIVATRGARLAAGVILGILKMKGRDIPROGGPKRMVVAMDGGLYEHYAYRTQLENTLKEBLLGDELATSIIVFHSNDGSG	479
At HXK1	NILATRGARLSAAGIYGLIKKLRDITKDEEVQKSVIAMDGGLFHEYTOFSECMSSSLKELLGDEASGSVEVTHSNDGSG	479
At HXK2	NILASRGARLSAAGIYGLIKKICRDATKDCGAQKSVIAMDGGLFHEYTOFSESMKSSLELLGDEVSEVTHSNDGSG	479
Le Hxk2	NIVATRGARLAAGIILGIIKMKCKDIPRESGPEKIVVAMDGGLYEHYTEYSKQLENTLVEBLLCKEMATSIIVFKHANDGSG	479
St HK1	NIVATRGARLDAAAGVILGILKMKGRDIPKQGGSERIVIAMDGGLYEHYTEYRMQLENTLKDLLGDELATSIIVFHSNDGSG	480
St HK2	NIVATRGARLSAAGIILGIIKMKKDIIPRESGPEKIVVAMDGGLYEHYTEYSKQLENTLVEBLLCKEMATSIIVFKHANDGSG	479
So HxK1	DVIASRGACTISAAGIILGLIKKLRDITLQGENQKSVIALDGGLFHEYAKRECMDDSLKELLGDEVAETIVIEHSNDGSG	479
Nb Hxk1	IGAALLAASHSMYLEDKS-----	497
At HXK1	IGAALLAASHSMYLEDS-----	496
At HXK2	VGAALLAASHSMYLEDDSETS	502
Le Hxk2	IGAALLAASHSMYVEDK-----	496
St HK1	IGAALLAASHSMYLEDQA-----	498
St HK2	IGAALLAASHSMYVEDK-----	496
So HxK1	IGAALLAASHSMYLEDSE-----	498