

## Supplementary Data file 1 (Nässel and Wu)

**Figure 1 – source data.** Accession numbers for precursors of the neuropeptides shown in Figure 2.

>sp|P06307.1| [Homo sapiens] CCK8

MNSGVCLCVLMAVLAAGALTQPVPPADPAGSGLQRAEEAPRRQLRVSQRTDG  
ESRAHLGALLARYIQQARKAPSGRMSIVKNLQNLDPSHRISDR**DYMGWMDF**  
**GRRSAEYEYEPS**

>NP\_000796.1 [Homo sapiens] gastrin14

MQRLCVYVLIFALALAAFSEA**SWKPRSQQPDA**PLGTGANRDLELPWLEQQGP  
ASHHRRQLGPQGPPHLVADPSKKQGPW**LEEEEEAYGWMDFG****RRSAEDEN**

>sp|P16240.2| [Ciona intestinalis] Cionin

MGSNIVIYFSIIIVT**LNVNGVPASDLFKSVSQYHIPRSKVINKETVT**KPLQFQR  
AICRLLQKLGEETFARLSQSELEAKQLDLIKTCYQANSFGDNENQGHMQRMD  
**RNYYGWMDFGKRAIEDVDY**EY

> (Daniel Thiel et al., 2021) [Phoronis australis] sulfakinin

MKNLIRSVLPLISICQLVHVANS**APFFT**KVPQHSIMGFVDILKDFSSRHPTKEL  
DQRPEQPQEMGPQGEYGA**KDMLY**PILVSSKAEERFEPLSQRTLFGQKLSKPS  
EANQDVENLYDIPNDK**DY**GIGGGRF**GKR**KSPT**KK**TPRSRYFYGGGRF**GR**SV  
ANFDHVDPETEEAFD

> (Daniel Thiel et al., 2021) [Lingula anatina] sulfakinin

MKSVFFVCIFFTTIV**VDCAPWQIGNRLRTSHISQAMHKLQGSLHRIFYLGRK**  
KPNSGQYFTNSFSTLKG**EPI**TNIYPMKGYIQVDQTKPVAASMQLKAFNGMD  
SPTTGK**QE**KRAWDDYGLGGGRY**GKRE**WDGTSGLTQDATKHSNGNTNS**K**  
**RSDIYWL**AGGRF**GR**DVSHVTDHVDPE  
NDDIEN

> (Daniel Thiel et al., 2021) [Notospermus geniculatus] sulfakinin

MNQALIIGVALFVVCASA**LPHKRTENAAGAKWSPSHTNHYQPEQFEKVF**NAL  
KGKD**TDRYDGLL**ALVAAAGDEQLAEKR**QV**DMDY**GW**SGGRF**GK**R**SVDNN**D  
HIF

>EKC26412.1 [Crassostrea gigas] sulfakinin

MKNSLEHLLISSV**LVLCLLFTLTKGN**SHA**QNSIIQLSKLFSNLQDIHD**AQTQE  
ENTKD**QVRSDTR**KQRGEIGLILALGAPVHVESLQHNDKDTQTDTDKSAWDV  
DFEDDDQDVE**KRQGA**WDYDYGLGGGRF**GKRF**DYNFGGGRW**GR**DVDHV**KQGQAK**

>XP\_005096263.1 [Aplysia californica] sulfakinin

MEPQLLSVV**VILVLCACA**ASA**LPTNSR**REDLSHLVTLLGKLKNIERARQNSEG

AQAHQAQEAWEGPRVSSFPETEVTADVIPDEVSAAKGYLGQRPATGVVNKRQQ  
AWSYDYGLGGGRFGKRSYGDYGIGGGRFGRDVDHVDSLSDATENEITS

>NP\_490908.1 [Caenorhabditis elegans] sulfakinin  
MLRHHS~~CALLMLILVFVEVFATQSPTFDRQDRD~~YRPLQF~~GKRDGYRPLQF~~GK  
~~R~~DYRPLQF~~GK~~SSGSSGPVVLEPIWEWQ

>NP\_524845.2 [Drosophila melanogaster] sulfakinin  
MGPRSCTHFATLFMPLWALAF~~CFLVVL~~PIPAQTTS~~LQNAKDD~~RRLQELESKIGG  
EIDQPIANLVGPSFS~~LF~~GDRRNQKTMSFGRRVPLISRPIPIELDLLMDNDDERT  
KA~~KRFDDYGHMRF~~GKRG~~GGDDQFDDYGHMRF~~GR

>XP\_039279256.1 [Nilaparvata lugens] sulfakinin  
MGCSTM~~TAVLLTVSVFLLQHQVGVL~~ANGAAASELM~~TSSND~~LVTANRGQT  
GRRRASLPVILSQARPNSKGQLIRARL~~TPLEPLISDLI~~DDVDDMMEIGKRQS  
DDYGHMRF~~GK~~GEADDKFDDYGHMRF~~GR~~DHV

>BAG49564.1 [Bombyx mori] sulfakinin  
MRIA~~AVM~~LLA~~VSVAVTFCVCC~~CDGANLRRVQPDDDEDFRPHPLYRDYGLIRSR  
VIR~~GDDTFDDYGHLRF~~GRSDD