

Thrombin Activation of Protein C Requires Prior Processing by a Liver Proprotein Convertase

Rachid Essalmani*, **Delia Susan-Resiga***, **Johann Guillemot***, **Kim WooJin***, **Vatsal Sachan***, **Zuhier Awan***, **Ann Chamberland***, **Marie-Claude Asselin***, **Kévin Ly****, **Roxane Desjardins****, **Robert Day****, **Annik Prat*** and **Nabil G. Seidah*[¶]**

SUPPLEMENTAL FIGURE LEGENDS

FIGURE S1. Alignment of human and mouse protein C primary sequences. The 18 amino acid signal peptide is underlined. Boxed are two PC-like cleavage sites and the thrombin site.

```

P04070 PROC_HUMAN      1 MWQLTSLLLFVATWGISGTPAPLDSVFSSSERAHQVLRIRKRANSFLEELRHSSLERECI
P33587 PROC_MOUSE     1 MWQFRVFLLLMSTWGISSIPAHPDPVFSSEHAHQVLRVR-RANSFLEEMRPGSLERECM
   ***:  :***:::*****.  ** * *****:*****:* *****:* .*****:

P04070 PROC_HUMAN     61 EEICDFEEAKEIFQNVDDTLAFWSKHVDGDQCLVLPLEHPCASLCCGHGTCIDGIGSFSC
P33587 PROC_MOUSE     60 EEICDFEEAQEIFQNVEDTLAFWIKYFDGDQCSAPPLDHQCDSPCCGHGTCIDGIGSFSC
   *****:*****:***** *.:.***** . **:* * * *****:*****

P04070 PROC_HUMAN    121 DCRSGWEGRFQCQREVSVFLNCSLDNGGCTHYCLEEVGWRRRCSCAPGYKLGDDLQCHPAVK
P33587 PROC_MOUSE    120 SCDKGWEGKFCQQELRFQDCRVNNGGCLHYCLEESNGRRRCACAPGYELADDMRCKSTVN
   .* .****:***:*: * :* ::**** *****   ***:*****:*.** ::*: **:

P04070 PROC_HUMAN    181 FPCGRPWKRMEKKRSHLKRDTEDQ-EDQVDPRLIDGKMTRRGDSPWQVVLLDSKKKLAG
P33587 PROC_MOUSE    180 FPCGKLRWIEKKRKILKRDTDELELEPDPRIVNGTLTKQGDSPWQAILLDSKKKLAG
   ****:  : :****. *****: : * : ****:::*.:.:*****.:*****:*****

P04070 PROC_HUMAN    240 AVLIHPSWVLTAAHCMDESKLLVRLGEYDLRRWEKWELDLDIKEVFVHPNYSKSTTDND
P33587 PROC_MOUSE    240 GVLIHTSWVLTAAHCVEGTTKLTVRLGEYDLRRRDHWELDLDIKEILVHPNYTRSSDND
   .**** *****: : :*** ***** : :*****:*****:*****:*.:.***

P04070 PROC_HUMAN    300 IALLHLAQPATLSQTIVPICLPDGLAERELNQAQGETLVTGWGYHSSREKEAKRNRTFV
P33587 PROC_MOUSE    300 IALLRLAQPATLSKTIVPICLPNNGLAQ-ELTQAQGETVVTGWGYQSDRIKDGRNRFTFI
   ****:*****:*****: .***: *.*****:*****:*. * * :.:*****:

P04070 PROC_HUMAN    360 LNFIKIPVVPNHNECSEVMSNMVSENMLCAGILGDRQDACEGDSGGPMVASFHGTWFLVGL
P33587 PROC_MOUSE    359 LTFIRIPLVARNECVEVMKNVSENMLCAGIIGDTRDADCSDGGPMVVFRTGTWFLVGL
   * .***:***: * :*** ***. * :*****:*** :***:*****. * :*****

P04070 PROC_HUMAN    420 VSWGEGCGLLHNYGVYTKVSRYLWDWIHGHIRDKEAPQKSWAP
P33587 PROC_MOUSE    419 VSWGEGCGHTNNYGIYTKVGSYLKWIHSYIGKGVSLKSQKL
   ***** .***:****. **.*.***:*. * . **

```