A

```
UGT1A10          MARAGWTSPVP-LCVCLLLTCG---FA--EAGKLLVVPMDGSHWFTMQSVVEKLILRGHE
UGT1A9           MACTGWTSPLP-LCVCLLLTCG---FA--EAGKLLVVPMDGSHWFTMRSVVEKLILRGHE
UGT1A7           MARTGWTSPIP-LCVSLLLTCG---FA--EAGKLLVVPMDGSHWFTMQSVVEKLILRGHE
UGT1A6           MAC--LLRSFQRISAGVFFLAL---WGMVVGDKLLVVPQDGSHWLSMKDIVEVLSDRGHE
UGT1A4           MAR-GLQVPLPRLATGLLLLLSVQPWA--ESGKVLVVPTDGSPWLSMREALRELHARGHQ
UGT1A3           MAT-GLQVPLPWLATGLLLLLSVQPWA--ESGKVLVVPIDGSHWLSMREVLRELHARGHQ
UGT1A8           MAV-ESQGGRP-LVLGLLLCVLGPVVS--HAGKILLIPVDGSHWLSMLGAIQQLQQRGHE
UGT1A1           MARTGWTSPIP-LCVSLLLTCG---FA--EAGKLLVVPMDGSHWFTMQSVVEKLILRGHE

UGT1A10          VVVVMPEVSWQLERSLNCTVKTYSTSYTLEDQNREFMVFAHAQWKAQ-AQSIFSLLMSSS
UGT1A9           VVVVMPEVSWQLGRSLNCTVKTYSTSYTLEDLDREFKAFAHAQWKAQ-VRSIYSLLMGSY
UGT1A7           VVVVMPEVSWQLGRSLNCTVKTYSTSYTLEDQDREFMVFADARWTAP-LRSAFSLLTSSS
UGT1A6           IVVVVPEVNLLLKESKYYTRKIYPVPYDQEELKNRYQSFGNNHFAERSFLTAPQTEYRNN
UGT1A4           AVVLTPEVNMHIKEEKFFTLTAYAVPWTQKEFDRVTLGYTQGFFETEHLLKRYSRSMAIM
UGT1A3           AVVLTPEVNMHIKEENFFTLTTYAISWTQDEFDRHVLGHTQLYFETEHFLKKFFRSMAML
UGT1A8           IVVLAPDASLYIRDGAFYTLKTYPVPFQREDVKESFVSLGHNVFENDSFLQRVIKTYKKI
UGT1A1           VVVVMPEVSWQLGKSLNCTVKTYSTSYTLEDLDREFMDFADAQWKAQ-VRSLFSLFLSSS
```

B

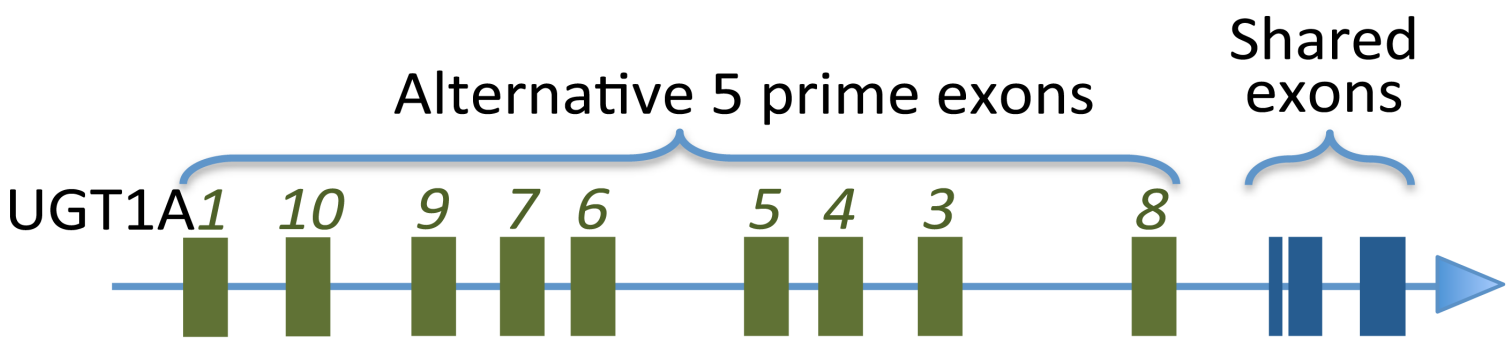

Figure S1. Splice event specific peptides for the UGT1A cluster
A. Multiple alignment of the N-terminal region of seven of the isoforms of the UGT1A cluster that were identified in the analysis. The peptides we detected in the eight data sets are mapped onto the alignment in colour. Although all peptides discriminate between some isoforms (even though they do not fall in the splice junction) red peptides discriminate between all splice isoforms, blue peptides only discriminate some of the isoforms. B. The UGT1A cluster exons.