SLC1A3 variant M128R

Overview of the raw variants

Raw variant 1: substitution at 859

GGAATGCGAGCTGTAGTCTATTATA T GACTACCACCATCATTGCTGTGGTG
GGAATGCGAGCTGTAGTCTATTATA G GACTACCACCATCATTGCTGTGGTG

NM 004172.4:n.859T>G

Affected transcripts - 1

NM_004172.4(SLC1A3_v001):c.383T>G

Affected proteins - 1

NM 004172.4(SLC1A3 i001):p.(Met128Arg)

Reference protein

```
MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV 61 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG 121 MRAVVYYMTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP NLVEACFKQF KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG 241 VNALGLVVFS MCFGFVIGNM KEQGQALREF FDSLNEAIMR LVAVIMWYAP VGILFLIAGK 301 IVEMEDMGVI GGQLAMYTVT VIVGLLIHAV IVLPLLYFLV TRKNPWVFIG GLLQALITAL 361 GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPVGATINMD GTALYEALAA IFIAQVNNFE LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET KM*
```

Protein predicted from variant coding sequence

```
MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV 61 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG 121 MRAVVYYRTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP NLVEACFKQF KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG VNALGLVVFS MCFGFVIGNM KEQGQALREF FDSLNEAIMR LVAVIMWYAP VGILFLIAGK IVEMEDMGVI GGQLAMYTVT VIVGLLIHAV IVLPLLYFLV TRKNPWVFIG GLLQALITAL GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPVGATINMD GTALYEALAA IFIAQVNNFE LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET KM*
```

Effects on Restriction sites

Raw variant Created Deleted

1

Experimental services

Genomic description: 859T>G

SLC1A3 variant C186S

Overview of the raw variants

Raw variant 1: substitution at 1032

GTTCCCTCCAAATCTGGTAGAAGCC T GCTTTAAACAGTTTAAAACCAACTA

NM 004172.4:n.1032T>A

Affected transcripts - 1

NM_004172.4(SLC1A3_v001):c.556T>A

Affected proteins - 1

NM 004172.4(SLC1A3 i001):p.(Cys186Ser)

Reference protein

```
MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV 61 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG 121 MRAVVYMTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP NLVEACFKQF KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG VNALGLVVFS MCFGFVIGNM KEQGQALREF FDSLNEAIMR LVAVIMWYAP VGILFLIAGK IVEMEDMGVI GGQLAMYTVT VIVGLLIHAV IVLPLLYFLV TRKNPWVFIG GLLQALITAL GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPVGATINMD GTALYEALAA IFIAQVNNFE LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET KM*
```

Protein predicted from variant coding sequence

```
1 MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV
61 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG
121 MRAVVYMTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP
181 NLVEASFKQF KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG
241 VNALGLVVFS MCFGFVIGNM KEQGQALREF FDSLNEAIMR LVAVIMWYAP VGILFLIAGK
301 IVEMEDMGVI GGQLAMYTVT VIVGLLIHAV IVLPLLYFLV TRKNPWVFIG GLLQALITAL
361 GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPVGATINMD GTALYEALAA IFIAQVNNFE
421 LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT
481 TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET
541 KM*
```

Effects on Restriction sites

Raw variant Created Deleted

1 AluI

Experimental services

Genomic description: 1032T>A

SLC1A3 variant T318A

Overview of the raw variants

Raw variant 1: substitution at 1428

GATTGGGGGGCAGCTTGCCATGTAC A CCGTGACTGTCATTGTTGGCTTACT
GATTGGGGGGCAGCTTGCCATGTAC G CCGTGACTGTCATTGTTGGCTTACT

NM 004172.4:n.1428A>G

Affected transcripts - 1

NM_004172.4(SLC1A3_v001):c.952A>G

Affected proteins - 1

NM 004172.4(SLC1A3 i001):p.(Thr318Ala)

Reference protein

```
MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV 61 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG 121 MRAVVYMTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP NLVEACFKQF KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG VNALGLVVFS MCFGFVIGNM KEQGQALREF FDSLNEAIMR LVAVIMWYAP VGILFLIAGK IVEMEDMGVI GGQLAMYTVT VIVGLLIHAV IVLPLLYFLV TRKNPWVFIG GLLQALITAL GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPVGATINMD GTALYEALAA IFIAQVNNFE LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET KM*
```

Protein predicted from variant coding sequence

```
1 MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV
61 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG
121 MRAVVYYMTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP
181 NLVEACFKQF KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG
241 VNALGLVVFS MCFGFVIGNM KEQGQALREF FDSLNEAIMR LVAVIMWYAP VGILFLIAGK
301 IVEMEDMGVI GGQLAMYAVT VIVGLLIHAV IVLPLLYFLV TRKNPWVFIG GLLQALITAL
361 GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPVGATINMD GTALYEALAA IFIAQVNNFE
421 LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT
481 TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET
541 KM*
```

Effects on Restriction sites

Raw variant Created Deleted

1 BceAI, MwoI BsrGI, Hpy166II

Experimental services

Genomic description: 1428A>G

SLC1A3 variant A329T

Overview of the raw variants

Raw variant 1: substitution at 1461

TGTCATTGTTGGCTTACTCATTCAC G CAGTCATCGTCTTGCCACTCCTCTA
TGTCATTGTTGGCTTACTCATTCAC A CAGTCATCGTCTTGCCACTCCTCTA

NM_004172.4:n.1461G>A

Affected transcripts - 1

NM_004172.4(SLC1A3_v001):c.985G>A

Affected proteins - 1

NM 004172.4(SLC1A3_i001):p.(Ala329Thr)

Reference protein

1	MTKSNGEEPK	MGGRMERFQQ	GVRKRTLLAK	KKVQNITKED	VKSYLFRNAF	VLLTVTAVIV
61	GTILGFTLRP	YRMSYREVKY	FSFPGELLMR	MLQMLVLPLI	ISSLVTGMAA	LDSKASGKMG
121	MRAVVYYMTT	TIIAVVIGII	IVIIIHPGKG	TKENMHREGK	IVRVTAADAF	LDLIRNMFPP
181	NLVEACFKQF	KTNYEKRSFK	VPIQANETLV	GAVINNVSEA	METLTRITEE	LVPVPGSVNG
241	VNALGLVVFS	MCFGFVIGNM	KEQGQALREF	FDSLNEAIMR	LVAVIMWYAP	VGILFLIAGK
301	IVEMEDMGVI	GGQLAMYTVT	VIVGLLIH A V	IVLPLLYFLV	TRKNPWVFIG	GLLQALITAL
361	GTSSSSATLP	ITFKCLEENN	GVDKRVTRFV	LPVGATINMD	GTALYEALAA	IFIAQVNNFE
421	LNFGQIITIS	ITATAASIGA	AGIPQAGLVT	MVIVLTSVGL	PTDDITLIIA	VDWFLDRLRT
481	TTNVLGDSLG	AGIVEHLSRH	ELKNRDVEMG	NSVIEENEMK	KPYQLIAQDN	ETEKPIDSET
541	KM*					

Protein predicted from variant coding sequence

```
1 MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV
61 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG
121 MRAVVYYMTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP
181 NLVEACFKQF KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG
241 VNALGLVVFS MCFGFVIGNM KEQGQALREF FDSLNEAIMR LVAVIMWYAP VGILFLIAGK
301 IVEMEDMGVI GGQLAMYTVT VIVGLLIHTV IVLPLLYFLV TRKNPWVFIG GLLQALITAL
361 GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPVGATINMD GTALYEALAA IFIAQVNNFE
421 LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT
481 TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET
541 KM*
```

Effects on Restriction sites

Raw variant Created Deleted

1 HpyCH4III

Experimental services

Genomic description: 1461G>A

SLC1A3 variant V393I

Overview of the raw variants

Raw variant 1: substitution at 1653

GCGCGTCACCAGATTCGTGCTCCCC G TAGGAGCCACCATTAACATGGATGG GCGCGTCACCAGATTCGTGCTCCCC A TAGGAGCCACCATTAACATGGATGG

NM_004172.4:n.1653G>A

Affected transcripts - 1

NM_004172.4(SLC1A3_v001):c.1177G>A

Affected proteins - 1

NM_004172.4(SLC1A3_i001):p.(Val393Ile)

Reference protein

1	MTKSNGEEPK	MGGRMERFQQ	GVRKRTLLAK	KKVQNITKED	VKSYLFRNAF	VLLTVTAVIV
61	GTILGFTLRP	YRMSYREVKY	FSFPGELLMR	MLQMLVLPLI	ISSLVTGMAA	LDSKASGKMG
121	MRAVVYYMTT	TIIAVVIGII	IVIIIHPGKG	TKENMHREGK	IVRVTAADAF	LDLIRNMFPP
181	NLVEACFKQF	KTNYEKRSFK	VPIQANETLV	GAVINNVSEA	METLTRITEE	LVPVPGSVNG
241	VNALGLVVFS	MCFGFVIGNM	KEQGQALREF	FDSLNEAIMR	LVAVIMWYAP	VGILFLIAGK
301	IVEMEDMGVI	GGQLAMYTVT	VIVGLLIHAV	IVLPLLYFLV	TRKNPWVFIG	GLLQALITAL
361	GTSSSSATLP	ITFKCLEENN	GVDKRVTRFV	LP V GATINMD	GTALYEALAA	IFIAQVNNFE
421	LNFGQIITIS	ITATAASIGA	AGIPQAGLVT	MVIVLTSVGL	PTDDITLIIA	VDWFLDRLRT
481	TTNVLGDSLG	AGIVEHLSRH	ELKNRDVEMG	NSVIEENEMK	KPYQLIAQDN	ETEKPIDSET
5/1	ĸw*					

Protein predicted from variant coding sequence

```
MTKSNGEEPK MGGRMERFQQ GVRKRTLLAK KKVQNITKED VKSYLFRNAF VLLTVTAVIV 61 GTILGFTLRP YRMSYREVKY FSFPGELLMR MLQMLVLPLI ISSLVTGMAA LDSKASGKMG 121 MRAVVYYMTT TIIAVVIGII IVIIIHPGKG TKENMHREGK IVRVTAADAF LDLIRNMFPP NLVEACFKQF KTNYEKRSFK VPIQANETLV GAVINNVSEA METLTRITEE LVPVPGSVNG VNALGLVVFS MCFGFVIGNM KEQGQALREF FDSLNEAIMR LVAVIMWYAP VGILFLIAGK IVEMEDMGVI GGQLAMYTVT VIVGLLIHAV IVLPLLYFLV TRKNPWVFIG GLLQALITAL GTSSSSATLP ITFKCLEENN GVDKRVTRFV LPIGATINMD GTALYEALAA IFIAQVNNFE LNFGQIITIS ITATAASIGA AGIPQAGLVT MVIVLTSVGL PTDDITLIIA VDWFLDRLRT TTNVLGDSLG AGIVEHLSRH ELKNRDVEMG NSVIEENEMK KPYQLIAQDN ETEKPIDSET KM*
```

Effects on Restriction sites

Raw variant Created Deleted

1

Experimental services

Genomic description: 1653G>A

SLC1A3 variant R454Q alias R499Q

Overview of the raw variants

Raw variant 1: substitution at 1467

GCTGGGATTGTGGAGCACTTGTCAC G ACATGAACTGAAGAACAGAGATGTT GCTGGGATTGTGGAGCACTTGTCAC A ACATGAACTGAAGAACAGAGATGTT

Affected transcripts - 1

XM_024446182.1(SLC1A3_v001):c.1361G>A

Affected proteins - 1

XM_024446182.1(SLC1A3_i001):p.(Arg454Gln)

Reference protein

1	MTKSNGEEPK	MGGRMERFQQ	GVRKRTLLAK	KKVQNITKED	VKSYLFRNAF	VLLTVTAVIV
61	GTILGFTLRP	YRMSYREVKY	FSFPGELLMR	MLQMLVLPLI	ISSLVTGMAA	LDSKASGKMG
121	MRAVVYYMTT	TIIAVVIGII	IVIIIHPGKG	TKENMHREGK	IVRVTAADAF	LDLIRNMFPP
181	NLVEACFKQF	KTNYEKRSFK	VPIQANETLV	GAVINNVSEA	METLTRITEE	LVPVPGSVNG
241	VNALGLVVFS	MCFGFVIGNM	KEQGQALREF	FDSLNEAIMR	LVAVIMWYAP	VGILFLIAGK
301	IVEMEDMGVI	GGQLAMYTVT	VIVGLLIHAV	IVLPLLYFLV	TRKNPWVFIG	GLLQALITAL
361	GTSSSSATLP	ITFKCLEENN	GVDKRVTRFV	LPVGATINMD	GTALYEALAA	IFIAQVNNFE
421	LNFGQIITIR	DRLRTTTNVL	GDSLGAGIVE	HLS R HELKNR	DVEMGNSVIE	ENEMKKPYQL
481	IAQDNETEKP	IDSETKM*				

Protein predicted from variant coding sequence

1	MTKSNGEEPK	MGGRMERFQQ	GVRKRTLLAK	KKVQNITKED	VKSYLFRNAF	VLLTVTAVIV
61	GTILGFTLRP	YRMSYREVKY	FSFPGELLMR	MLQMLVLPLI	ISSLVTGMAA	LDSKASGKMG
121	MRAVVYYMTT	TIIAVVIGII	IVIIIHPGKG	TKENMHREGK	IVRVTAADAF	LDLIRNMFPP
181	NLVEACFKQF	KTNYEKRSFK	VPIQANETLV	GAVINNVSEA	METLTRITEE	LVPVPGSVNG
241	VNALGLVVFS	MCFGFVIGNM	KEQGQALREF	FDSLNEAIMR	LVAVIMWYAP	VGILFLIAGK
301	IVEMEDMGVI	GGQLAMYTVT	VIVGLLIHAV	IVLPLLYFLV	TRKNPWVFIG	GLLQALITAL
361	GTSSSSATLP	ITFKCLEENN	GVDKRVTRFV	LPVGATINMD	GTALYEALAA	IFIAQVNNFE
421	LNFGQIITIR	DRLRTTTNVL	GDSLGAGIVE	HLSQHELKNR	DVEMGNSVIE	ENEMKKPYQL
481	IAQDNETEKP	IDSETKM*				

Effects on Restriction sites

Raw variant Created Deleted

1 Hpy188III

Experimental services

Genomic description: 1467G>A