

B.T CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMKTSLGPNGLDKM
R.N CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMRTSLGPNGLDKM
M.M CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMRTSLGPNGLDKM
H.S CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMRTSLGPNGLDKM
B.B CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMKTSLGPNGLDKM
O.A CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMKTSLGPNGLDKM
C.H CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMKTSLGPNGLDKM
S.S CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMKTSLGPNGLDKM
E.C CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMRTSLGPNGLDKM
C.F CCT5 MASVGTALFDEYGRPFLIKDQDRKSRMLMGLEALKSHIMAAKAVANTMKTSLGPNGLDKM

B.T CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
R.N CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
M.M CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
H.S CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
B.B CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
O.A CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
C.H CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
S.S CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
E.C CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA
C.F CCT5 MVDKDGDTVVTNDGATILSMMDVDHQIAKLMVELSKSQDDEIGDGTGTVVVLGALLEEA

B.T CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDSVLDVDMKNTEPLIQTAKTTLGSKVVNS
R.N CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDNVLDVDDINPEPLIQTAKTTLGSKVVNS
M.M CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDKVLDVDDINPEPLIQTAKTTLGSKVVNS
H.S CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDSVLDVDDKDTEPLIQTAKTTLGSKVVNS
B.B CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDSVLDVDMKNTEPLIQTAKTTLGSKVVNS
O.A CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDSVLDVDMKNTEPLIQTAKTTLGSKVVNS
C.H CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDSVLDVDMKNTEPLIQTAKTTLGSKVVNS
S.S CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDSVLDVDMKDTEPLIQTAKTTLGSKVVNS
E.C CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDRVLDVDIRDTEPLIQTAKTTLGSKVVNS
C.F CCT5 EQLDRGIHPIRIADGYEQAAARIAEHLDKISDSVLDVDDKDTEPLIQTAKTTLGSKVVNS

B.T CCT5 CHRQMAEIAVNAVLTVADMORRDVDFELIKVEGKVGGRLEDTKLIKGVIVDKDFSHQPMP
R.N CCT5 CHRQMAEIAVNAVLTVADMERRDVDFELIKVEGKVGGRLEDTKLIKGVIVDKDFSHQPMP

M.M CCT5 CHRQMAEIAVNAVLTVADMERRDVSDFELIKVEGKVGGRLEDTKLIKGIVVDKDFSHQPMP
H.S CCT5 CHRQMAEIAVNAVLTVADMERRDVSDFELIKVEGKVGGRLEDTKLIKGIVVDKDFSHQPMP
B.B CCT5 CHRQMAEIAVNAVLTVADMERRDVSDFELIKVEGKVGGRLEDTKLIKGIVVDKDFSHQPMP
O.A CCT5 CHRQMAEIAVNAVLTVADMERRDVSDFELIKVEGKVGGRLEDTKLIKGIVVDKDFSHQPMP
C.H CCT5 CHRQMAEIAVNAVLTVADMERRDVSDFELIKVEGKVGGRLEDTKLIKGIVVDKDFSHQPMP
S.S CCT5 CHRQMAEIAVNAVLTVADMERRDVSDFELIKVEGKVGGRLEDTKLIKGIVVDKDFSHQPMP
E.C CCT5 CHRQMAEIAVNAVLTVADMERRDVSDFELIKVEGKVGGRLEDTKLIKGIVVDKDFSHQPMP
C.F CCT5 CHRQMAEIAVNAVLTVADMERRDVSDFELIKVEGKVGGRLEDTKLIKGIVVDKDFSHQPMP

B.T CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
R.N CCT5 KEVLNAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
M.M CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
H.S CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
B.B CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
O.A CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
C.H CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
S.S CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
E.C CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA
C.F CCT5 KQVEDAKIAILTCPFEPKPKTKHKLDVTSVEDFKALQKYEKEKFEEMIRQIKETGANLA

B.T CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
R.N CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
M.M CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
H.S CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
B.B CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
O.A CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
C.H CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
S.S CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
E.C CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK
C.F CCT5 ICQWGFDDDEANHLLLQNDLPAVRWVGGPEIELIAIATGGRIVPRFSELTAEKLGFAGLVK

B.T CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLRDNRVY
R.N CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLRDNRVY
M.M CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLRDNRVY
H.S CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLRDNRVY

B.B CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLIRDNRVVY
 O.A CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLIRDNRVVY
 C.H CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLIRDNRVVY
 S.S CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLIRDNRVVY
 E.C CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLIRDNRVVY
 C.F CCT5 EISFGTTKDKMLVIEQCKNSRAVTIFIRGGNKMIIIEAKRSLHDALCVIRNLIRDNRVVY

B.T CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 R.N CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 M.M CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 H.S CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 B.B CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 O.A CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 C.H CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 S.S CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 E.C CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR
 C.F CCT5 GGGAAEISCALAVSQEADKCPTLEQYAMRAFADALEVIPMALAENSGMNPQTMTEVRAR

B.T CCT5 QVKEVNPALGIDCLHKGINDMKHQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 R.N CCT5 QVKESNPALGIDCLHKGINDMQYQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 M.M CCT5 QVKESNPALGIDCLHKGINDMQYQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 H.S CCT5 QVKEVNPALGIDCLHKGINDMKHQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 B.B CCT5 QVKEVNPALGIDCLHKGINDMKHQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 O.A CCT5 QVKEVNPALGIDCLHKGINDMKHQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 C.H CCT5 QVKEVNPALGIDCLHKGINDMKHQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 S.S CCT5 QVKEVNPALGIDCLHKGINDMKHQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 E.C CCT5 QVKELNPALGIDCLHKGINDMKHQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE
 C.F CCT5 QVKEVNPALGIDCLHKGINDMKHQHVIETLIGKKQQISLATQMVRMILKIDDIRKPGESSEE

Figure 1 The multiple sequence alignment among the CCT5 of different species.

The most of the sequence are conserved with minor variations in context to BT; (Bos taurus), RN; (Rattus norvegicus), MM; (Mus musculus), HS; (Homo sapiens), BB; (Bubalus bubalis), OA; (Ovis aries), CH; (Capra hircus), SS; (Sus scrofa), EC; (Equus caballus), CF; (Camelus ferus). The observed variations in CCT5 have been highlighted in red colour in the alignment.