An alignment of IgG sequences from Human, Mouse and Rat

C_H1 Sequences

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Human IgG1    ASTKGPSVFPLAPSSKSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYICNVNHKPSNTKVDKKV
Human IgG2    ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSNFGTQTYTCNVDHKPSNTKVDKTV
Human IgG3    ASTKGPSVFPLAPCSRSTSGGTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTQTYTCNVNHKPSNTKVDKRV
Human IgG4    ASTKGPSVFPLAPCSRSTSESTAALGCLVKDYFPEPVTVSWNSGALTSGVHTFPAVLQSSGLYSLSSVVTVPSSSLGTKTYTCNVDHKPSNTKVDKRV

Mouse IgG1    AKTTPPSVYPLAPGSAAQTNSMVTLGCLVKGYFPEPVTVTWNSGSLSSGVHTFPAVLQS_DLYTLSSSVTVPSSPRPSETVTCNVAHPASSTKVDKKI
Mouse IgG2a^b AKTTAPSVYPLAPVCGGTTGSSVTLGCLVKGYFPEPVTLTWNSGSLSSGVHTFPALLQS_GLYTLSSSVTVTSNTWPSQTITCNVAHPASSTKVDKKI
Mouse IgG2a^a AKTTAPSVYPLAPVCGDTTGSSVTLGCLVKGYFPEPVTLTWNSGSLSSGVHTFPAVLQS_DLYTLSSSVTVTSSTWPSQSITCNVAHPASSTKVDKKI
Mouse IgG2b   AKTTPPSVYPLAPGCGDTTGSSVTSGCLVKGYFPEPVTVTWNSGSLSSSVHTFPALLQS_GLYTMSSSVTVPSSTWPSQTVTCSVAHPASSTTVDKKL
Mouse IgG3    _TTTAPSVYPLVPGCSDTSGSSVTLGCLVKGYFPEPVTVKWNYGALSSGVRTVSSVLQS_GFYSLSSLVTVPSSTWPSQTVICNVAHPASKTELIKRI

Rat   IgG1    AETTAPSVYPLAPGTALKSNSMVTLGCLVKGYFPEPVTVTWNSGALSSGVHTFPAVLQS_GLYTLTSSVTVPSSTWSSQAVTCNVAHPASSTKVDKKI
Rat   IgG2a   AETTAPSVYPLAPGTALKSNSMVTLGCLVKGYFPEPVTVTWNSGALSSGVHTFPAVLQS_GLYTLTSSVTVPSSTWPSQTVTCNVAHPASSTKVDKKI
Rat   IgG2b   AQTTAPSVYPLAPGCGDTTSSTVTLGCLVKGYFPEPVTVTWNSGALSSDVHTFPAVLQS_GLYTLTSSVT__SSTWPSQTVTCNVAHPASSTKVDKKV
Rat   IgG2c   ATTTAPSVYPLVPGCSGTSGSLVTLGCLVKGYFPEPVTVKWNSGALSSGVHTFPAVLQS_GLYTLSSSVTVPSSTWSSQTVTCSVAHPATKSNLIKRI
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Hinge Sequences

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Human IgG1    EPKSCDKTHTCPPCP
Human IgG2    ERKCCVECPPCP
Human IgG3    ELKTPLGDTTHTCPRCP----EPKSCDTPPPCPRCP----EPKSCDTPPPCPRCP----EPKSCDTPPPCPRCP
Human IgG4    SPNMVPHAHHAQ

Mouse IgG1    VPRDCGCKPCICT
Mouse IgG2a^b EPRVPITQNPCPPLKECPPCA
Mouse IgG2a^a EPRGPTIKPCPPCKCP
Mouse IgG2b   EPSGPISTINPCPPCKECHKCP
Mouse IgG3    EPRIPKPSTPPGSSCP

Rat   IgG1    VPRNCGGDCKPCICT
Rat   IgG2a   VPRECNPCGCT
Rat   IgG2b   ERRNGGIGHKCPTCPTCHKCP
Rat   IgG2c   EPRRPKPRPPTDICSC
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An alignment of IgG sequences from Human, Mouse and Rat

C_H2 Sequences

```
Human IgG1    APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVKFNWYVDGVEVHNAKTKPREEQYNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKAK
Human IgG2    APP_VAGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTFRVVSVLTVVHQDWLNGKEYKCKVSNKGLPAPIEKTISKTK
Human IgG3    APELLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSHEDPEVQFKWYVDGVEVHNAKTKPREEQYNSTFRVVSVLTVLHQDWLNGKEYKCKVSNKALPAPIEKTISKTK
Human IgG4    APEFLGGPSVFLFPPKPKDTLMISRTPEVTCVVVDVSQEDPEVQFNWYVDGVEVHNAKTKPREEQFNSTYRVVSVLTVLHQDWLNGKEYKCKVSNKGLPSSIEKTISKAK

Mouse IgG1    VPEV___SSVFIFPPKPKDVLTITLTPKVTCVVVDISKDDPEVQFSWFVDDVEVHTAQTQPREEQFNSTFRSVSELPIMHQDWLNGKEFKCRVNSAAFPAPIEKTISKTK
Mouse IgG2a^b APDLLGGPSVFIFPPKIKDVLMISLSPMVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHREDYNSTLRVVSALPIQHQDWMSGKEFKCKVNNRALPSPIEKTISKPR
Mouse IgG2a^a APNLLGGPSVFIFPPKIKDVLMISLSPIVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHREDYNSTLRVVSALPIQHQDWMSGKEFKCKVNNKDLPAPIERTISKPK
Mouse IgG2b   APNLEGGPSVFIFPPNIKDVLMISLTPKVTCVVVDVSEDDPDVQISWFVNNVEVHTAQTQTHREDYNSTIRVVSTLPIQHQDWMSGKEFKCKVNNKDLPSPIERTISKIK
Mouse IgG3    AGNILGGPSVFIFPPKPKDALMISLTPKVTCVVVDVSEDDPDVHVSWFVDNKEVHTAWTQPREAQYNSTFRVVSALPIQHQDWMRGKEFKCKVNNKALPAPIERTISKPK

Rat   IgG1    GSEV___SSVFIFPPKTKDVLTITLTPKVTCVVVDISQNDPEVRFSWFIDDVEVHTAQTHAPEKQSNSTLRSVSELPIVHRDWLNGKTFKCKVNSGAFPAPIEKSISKPE
Rat   IgG2a   GSEV___SSVFIFPPKPKDVLTITLTPKVTCVVVDISQDDPEVHFSWFVDDVEVHTAQTRPPEEQFNSTFRSVSELPILHQDWLNGRTFRCKVTSAAFPSPIEKTISKPE
Rat   IgG2b   VPELLGGPSVFIFPPKPKDILLISQNAKVTCVVVDVSEEEPDVQFSWFVNNVEVHTAQTQPREEQYNSTFRVVSALPIQHQDWMSGKEFKCKVNNKALPSPIEKTISKPK
Rat   IgG2c   DDNL_GRPSVFIFPPKPKDILMITLTPKVTCVVVDVSEEEPDVQFSWFVDNVRVFTAQTQPHEEQLNGTFRVVSTLHIQHQDWMSGKEFKCKVNNKDLPSPIEKTISKPR
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C_H3 Sequences

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Human IgG1    GQPREPQVYTLPPSRDELTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
Human IgG2    GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPMLDSDGSFFLYSKLTVDKSRWQQGNVFSCSVMHEALHNHYTQKSLSLSPGK
Human IgG3    GQPREPQVYTLPPSREEMTKNQVSLTCLVKGFYPSDIAVEWESSGQPENNYNTTPPMLDSDGSFFLYSKLTVDKSRWQQGNIFSCSVMHEALHNRFTQKSLSLSPGK
Human IgG4    GQPREPQVYTLPPSQEEMTKNQVSLTCLVKGFYPSDIAVEWESNGQPENNYKTTPPVLDSDGSFFLYSRLTVDKSRWQEGNVFSCSVMHEALHNHYTQKSLSLSLGK

Mouse IgG1    GRPKAPQVYTIPPPKEQMAKDKVSLTCMITDFFPEDITVEWQWNGQPAENYKNTQPIMNTNGSYFVYSKLNVQKSNWEAGNTFTCSVLHEGLHNHHTEKSLSHSPGK
Mouse IgG2a^b GPVRAPQVYVLPPPAEEMTKKEFSLTCMITGFLPAEIAVDWTSNGRTEQNYKNTATVLDSDGSYFMYSKLRVQKSTWERGSLFACSVVHEVLHNHLTTKTISRSLGK
Mouse IgG2a^a GSVRAPQVYVLPPPEEEMTKKQVTLTCMVTDFMPEDIYVEWTNNGKTELNYKNTEPVLDSDGSYFMYSKLRVEKKNWVERNSYSCSVVHEGLHNHHTTKSFSRTPGK
Mouse IgG2b   GLVRAPQVYTLPPPAEQLSRKDVSLTCLVVGFNPGDISVEWTSNGHTEENYKDTAPVLDSDGSYFIYSKLNMKTSKWEKTDSFSCNVRHEGLKNYYLKKTISRSPGK
Mouse IgG3    GRAQTPQVYTIPPPREQMSKKKVSLTCLVTNFFSEAISVEWERNGELEQDYKNTPPILDSDGTYFLYSKLTVDTDSWLQGEIFTCSVVHEALHNHHTQKNLSRSPGK

Rat   IgG1    GRTQVPHVYTMSPTKEEMTQNEVSITCMVKGFYPPDIYVEWQMNGQPQENYKNTPPTMDTDGSYFLYSKLNVKKEKWQQGNTFTCSVLHEGLHNHHTEKSLSHSPGK
Rat   IgG2a   GTPRGPQVYTMAPPKEEMTQSQVSITCMVKGFYPPDIYTEWKMNGQPQENYKNTPPTMDTDGSYFLYSKLNVKKETWQQGNTFTCSVLHEGLHNHHTEKSLSHSPGK
Rat   IgG2b   GLVRKPQVYVMGPPTEQLTEQTVSLTCLTSGFLPNDIGVEWTSNGHIEKNYKNTEPVMDSDGSFFMYSKLNVERSRWDSRAPFVCSVVHEGLHNHHVEKSISRPPGK
Rat   IgG2c   GKARTPQVYTIPPPREQMSKNKVSLTCMVTSFYPASISVEWERNGELEQDYKNTLPVLDSDESYFLYSKLSVDTDSWMRGDIYTCSVVHEALHNHHTQKNLSRSPGK
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