

## Human Myelin Basic Protein Isoforms

21.5kDa MASQKRPSQRHGSKYLATASTMDHARHGFLPRHRDTGILLDSIGRFFGGDRGAPKRGSCKV 60  
 20.2kDa MASQKRPSQRHGSKYLATASTMDHARHGFLPRHRDTGILLDSIGRFFGGDRGAPKRGSCKV 60  
 18.5kDa MASQKRPSQRHGSKYLATASTMDHARHGFLPRHRDTGILLDSIGRFFGGDRGAPKRGS-- 58  
 17.2kDa MASQKRPSQRHGSKYLATASTMDHARHGFLPRHRDTGILLDSIGRFFGGDRGAPKRGS-- 58  
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21.5kDa PWLKPGRSELPSHARSQPGLCNMYKDSHHPARTAHYGSLLPQKSHGRTQDENPVVHFFKNI 120  
 20.2kDa PWLKPGRSELPSHARSQPGLCNMYKDSHHPARTAHYGSLLPQKSHGRTQDENPVVHFFKNI 120  
 18.5kDa -----KDSHHPARTAHYGSLLPQKSHGRTQDENPVVHFFKNI 94  
 17.2kDa -----KDSHHPARTAHYGSLLPQKSHGRTQDENPVVHFFKNI 94  
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<MCA-7D5>  
 <MCA-7G7> <-----MCA-7D2----->

21.5kDa VTPRTPPPSQGKGRGLSLSRFSWGAEQGRPGFGYGGRASDYKSAHKGFKGVDAQGTLSKI 180  
 20.2kDa VTPRTPPPSQGK-----AEGORPGFGYGGRASDYKSAHKGFKGVDAQGTLSKI 169  
 18.5kDa VTPRTPPPSQGKGRGLSLSRFSWGAEQGRPGFGYGGRASDYKSAHKGFKGVDAQGTLSKI 154  
 17.2kDa VTPRTPPPSQGK-----AEGORPGFGYGGRASDYKSAHKGFKGVDAQGTLSKI 143  
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21.5kDa FKLGGDRSRSGSPMARR 197  
 20.2kDa FKLGGDRSRSGSPMARR 186  
 18.5kDa FKLGGDRSRSGSPMARR 171  
 17.2kDa FKLGGDRSRSGSPMARR 160  
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## Rat Myelin Basic Protein Isoforms

21.5kDa MASQKRPSQRHGSKYLATASTMDHARHGFLPRHRDTGILLDSIGRFFSGDRGAPKRGSCKV 60  
 18.5kDa MASQKRPSQRHGSKYLATASTMDHARHGFLPRHRDTGILLDSIGRFFSGDRGAPKRGS-- 58  
 17kDa MASQKRPSQRHGSKYLATASTMDHARHGFLPRHRDTGILLDSIGRFFSGDRGAPKRGSCKV 60  
 14kDa MASQKRPSQRHGSKYLATASTMDHARHGFLPRHRDTGILLDSIGRFFSGDRGAPKRGS-- 58  
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21.5kDa PWLKQSRSELPSHARSRPGLCNMYKDSHTRTTHYGSLLPQKSQRTQDENPVVHFFKNIIVTP 120  
 18.5kDa -----KDSHTRTTHYGSLLPQKSQRTQDENPVVHFFKNIIVTP 94  
 17kDa PWLKQSRSELPSHARSRPGLCNMYKDSHTRTTHYGSLLPQKSQRTQDENPVVHFFKNIIVTP 120  
 14kDa -----KDSHTRTTHYGSLLPQKSQRTQDENPVVHFFKNIIVTP 94  
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<MCA-7D5>  
 <MCA-7G7> <-----MCA-7D2----->

21.5kDa RTPPPSQGKGRGLSLSRFSWGAEQKPGFGYGGRASDYKSAHKGFKGYDAQGTLSKIEK 180  
 18.5kDa RTPPPSQGKGRGLSLSRFSWGAEQKPGFGYGGRASDYKSAHKGFKGYDAQGTLSKIEK 154  
 17kDa RTPPPSQGKGRGLSLSRFSWG----- 141  
 14kDa RTPPPSQGKGRGLSLSRFSWG----- 115  
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21.5kDa LGGRDSRSGSPMARR 195  
 18.5kDa LGGRDSRSGSPMARR 169  
 17kDa --GRDSRSGSPMARR 154  
 14kDa --GRDSRSGSPMARR 128  
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In both human and rat there are four alternate transcripts from one gene, resulting from the inclusion or exclusion of two exons. Charged amino acids are hatched and large hydrophobic amino acids are blocked out and epitopes for MCA-7G7, MCA-7D5 and MCA-7D2 are indicated.