

## PRG2009 Protein Information

Dear PRG2009 Study Participant:

The following gives information on the biological source for the four proteins that are part of the PRG2009 sample. Please note that all proteins were prepared by commercial vendors and the PRG does not have complete details on protein heterogeneity resulting from truncations, isoforms, post-translational modifications, etc.

Sequence information reflects what is listed in several protein databases.

### Prostate specific antigen

(from human seminal fluids)

#### Signal peptide

##### prostate specific antigen isoform 3 preproprotein [Homo sapiens]

MWVPVVFLTSLVTWIGAAPLILSRIVGGWECEKHSQPWQVLVASRGRAVCGGV  
LVHPQWVLTAAHCIRNKSVILLGRHSLFHPEDTGQVFQVSHSFPHPPLYDMSLLKN  
RFLRPGDDSSHDLMLLRLSEPAELTDAVKVMDLPTQEPALGTTCYASGWGSIEPE  
EFLTPKKLQCVDLHVISNDVCAQVHPQKVTKFMLCAGRWTGGKSTCSWVILITE  
LTMPALPMVLHGSLVPWRGGV

##### prostate specific antigen isoform 4 preproprotein [Homo sapiens]

MWVPVVFLTSLVTWIGAAPLILSRIVGGWECEKHSQPWQVLVASRGRAVCGGV  
LVHPQWVLTAAHCIRKPGDDSSHDLMLLRLSEPAELTDAVKVMDLPTQEPALGT  
TCYASGWGSIEPEEFLTPKKLQCVDLHVISNDVCAQVHPQKVTKFMLCAGRWT  
GGKSTCSGDSGGPLVCNGVLQGITSWGSEPCALPERPSLYTKVVHYRKWIKDTIV  
ANP

##### prostate specific antigen isoform 5 preproprotein [Homo sapiens]

MWVPVVFLTSLVTWIGAAPLILSRIVGGWECEKHSQPWQVLVASRGRAVCGGV  
LVHPQWVLTAAHCIRNKSVILLGRHSLFHPEDTGQVFQVSHSFPHPPLYDMSLLKN  
RFLRPGDDSSIEPEEFLTPKKLQCVDLHVISNDVCAQVHPQKVTKFMLCAGRWT  
GGKSTCSGDSGGPLVCNGVLQGITSWGSEPCALPERPSLYTKVVHYRKWIKDTIV  
ANP

##### prostate specific antigen isoform 6 preproprotein [Homo sapiens]

MWVPVVFLTSLVTWIGAAPLILSRIVGGWECEKHSQPWQVLVASRGRAVCGGV  
LVHPQWVLTAAHCIRK

##### prostate specific antigen isoform 1 preproprotein [Homo sapiens]

MWVPVVFLTSLVTWIGAAPLILSRIVGGWECEKHSQPWQVLVASRGRAVCGGV  
LVHPQWVLTAAHCIRNKSVILLGRHSLFHPEDTGQVFQVSHSFPHPPLYDMSLLKN  
RFLRPGDDSSHDLMLLRLSEPAELTDAVKVMDLPTQEPALGTTCYASGWGSIEPE  
EFLTPKKLQCVDLHVISNDVCAQVHPQKVTKFMLCAGRWTGGKSTCSGDSGGP  
LVCNGVLQGITSWGSEPCALPERPSLYTKVVHYRKWIKDTIVANP

## Beta human chorionic gonadotropin (recombinant protein from mouse cell line)

Signal peptide

Glycosylation site

### Chorionic gonadotrophin alpha subunit (CG-alpha) [Homo sapiens]

MDYYRK<sup>Y</sup>AAIFL<sup>V</sup>TL<sup>S</sup>VFL<sup>H</sup>VL<sup>H</sup>SAPDVQDCPECTLQENPFFSQPGAPILQCMGC  
CFSRAYPTPLRSKKTMLVQKN<sup>V</sup>TSESTCCVAKSYNRVTVMGGFKVEN<sup>H</sup>TACHC  
STCYYHKS

### Choriogonadotropin subunit beta precursor (CG-beta) [Homo sapiens]

MEMFQGLLLLLLLLLSMGGT<sup>W</sup>ASKEPLRPRCRPIN<sup>A</sup>TLAVEKEGCPVCITV<sup>N</sup>TTICA  
GYCPTMTRVLQGVLPALPQVVCNYRDVRFESIRLPGCPRGVNPVVSYAVALSCQ  
CALCRRSTTDCGGPKDHPLTCDDPRFQDSSSS<sup>S</sup>KAPPP<sup>S</sup>LPS<sup>S</sup>R<sup>S</sup>RLPG<sup>S</sup>SDTPILPQ

## Glycogen phosphorylase A/B (from rabbit muscle)

Phosphorylation site in 'A' isoform

Acetylated N-terminal amino acid

### Glycogen phosphorylase, muscle form (Myophosphorylase) [PYGM\_RABIT]

(M)SRPLSDQEKRKQIS<sup>V</sup>RGLAGVENVTELKKNFNRHLHFTLVKDRNVATPRDY  
YFALAHTVRDHLVGRWIRTQQHYEYKDPKRIYYLSLEFYMGRTLQNTMVNLAL  
ENACDEATYQLGLDMEELEEIEEDAGLGNGGLGRLAACFLDSMATLGLAAYGY  
GIRYEFGIFNQKICGGWQMEEADDWLRYGNPWEKARPEFTLPVHFYGRVEHTSQ  
GAKWVD<sup>T</sup>QVVLAMPYDTPVPGYRNNVVNTMRLWSAKAPNDFNLKDFNVGGY  
IQAVLDRNLAENISRVLYPNDNFFEGKELRLKQEYFVVAATLQDIIRRFKSSKFGC  
RDPVRTNFD<sup>A</sup>FPDKVAIQLN<sup>D</sup>THPSLAPELMRVLVDLERLDWDKAW<sup>E</sup>VTVKTC  
AYTNHTVLPEALERWPVHLL<sup>E</sup>TLLPRHLQIIYEINQRFLNRVAAAFPGDVDR<sup>L</sup>RR  
MSLVEEGAVKRINMAHL<sup>C</sup>IAGSHAVNGVARIHSEILKKTIFKDFYELEPHKFQNK  
TNGITPRRWLVLCNPGLAEIIAERIGEEYISDLDQLRKL<sup>S</sup>YVDDEAFIRD<sup>V</sup>AKVK  
QENKLKFAAYLEREYKVHINPNSLFDVQVKRIHEYKRQLLNCLHVITLYNRIKKE  
PNKFVVPRTVMIGGKAAPGYHMAKMI<sup>I</sup>KLITAIGDVVN<sup>H</sup>DPVVGDR<sup>L</sup>RVIFLEN  
YRVSLAEKVIPAADLSEQISTAGTEASGTGNMKFMLNGALTIGTMDGANVEMAE  
EAGEENFFIFGMRVEDVDRLDQ<sup>R</sup>GYNAQEYYDRIP<sup>E</sup>L<sup>R</sup>QII<sup>E</sup>QLSSGFFSPKQ<sup>P</sup>DL  
FKDIVNMLMHHDRFKVFADYEEYVKCQ<sup>E</sup>RV<sup>S</sup>ALYKNPREWTRMVIRNIATSGK  
FSSDR<sup>T</sup>IAQYAREIWGVEPSRQRLPAPDEKIP