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AtTRM4C  L D A P C S G T G I S K D E S V K I T ----- K T M D E I K K F A H L Q K Q L L A A I D M V D A N S K T G G Y I V Y S T C S I M V T E N
AtTRM4D  L D A P C S G T G V I S K D E S V K I S ----- K S A D D I K K F A H L Q K Q L I L G A I D L V D A N S K T G G Y I V Y S T C S V M I P E V
AtTRM4E  L D A P C S G L G V L S K R A D L R W N ----- R K L E D M L E L T K L Q D E L L D S A S K L V K H --- G G V L V Y S T C S I D P E E N
AtTRM4H  L D P S C S G S G T I T D R L D H L L P S H ----- S E D N - N M N Y D S M R L H K L A V F Q K K A L A H A L S F P K V E R V V Y S T C S I Y Q I E N
PagTRM4C-a L D A P C S G T G V I S K D E S V K I S ----- K S S E D I E Q C A H L Q K Q L L A A I D M V D A N S K S G G Y I V Y S T C S I M V A E N
PagTRM4C-b L D A P C S G T G V I S K D E S V K I S ----- K S S E D I E Q C A H L Q K Q L L A A I D M V D A N S K S G G Y I V Y S T C S I M V A E N
PagTRM4E-a L D A P C S G L G V L S K R A D L R W N ----- R R L E D L E E L K K L Q E E L L D A A S I L V K P --- G G V L V Y S T C S I D P E E N
PagTRM4E-b L D A P C S G L G V L S K R A D L R W N ----- R R L E D L E E L K K L Q E E L L D A A S I L V K P --- G G V L V Y S T C S I D P E E N
PagTRM4H-a L D P S C S G S G T A A Q R L D H L L P S R ----- T T D --- F V D I E R L N K L A A F Q K K A L A H A L S F P A V K R I V Y S T C S V N Q I E N
PagTRM4H-b L D P S C S G S G T A A Q R L D H L L P S R ----- T T D --- F V D I E R L N K L A A F Q K K A L A H A L S F P A V K R I V Y S T C S I N Q I E N
OsNSUN4  L D A P C T G T G T I W K D P Q I K T S ----- K G I E D I R D C A F V Q K Q L L A A I D L V D A N S K T G G Y I V Y S T C S L M I P E N
OsNSUN5  L D A P C T G T G T I W K D P Q I K T S ----- K G I E D I R D C A F V Q K Q L L A A I D L V D A N S K T G G Y I V Y S T C S L M I P E N
OsNSUN7  L D P S C S G S G I S T E R L D H L L P S H ----- S R G N Q D D A S T S S R I R K L S A F Q R K A L S H A L S F P S V E R V V Y S T C S I H Q A E N
OsNSUN8  L D A P C S G L G V L S K R A D L R W N ----- R Q F E D L E E L M C L Q D E L L D S A S M L V K P --- G G I L V Y S T C S I D P E E N

AtTRM4A  C D V P C S G D G T L R K A P D I W R R W N S G S G N G L H S L Q V V L A M R G L S L L K V G G R M V Y S T C S M N P
AtTRM4B  C D V P C S G D G T L R K A P D I W R R W N S G M G N G L H S L Q I I L A M R G L S L L K V G G K M I Y S T C S M N P
PagTRM4A-a C D V P C S G D G T L R K A P D M W R K W N P G M G N G L H S L Q I Q I A M R G L S L L K V G G R M V Y S T C S M N P
PagTRM4A-b C D V P C S G D G T L R K A P D M W R K W N P G M G N G L H S L Q I Q I A M R G L S L L K V G G R M V Y S T C S M N P
OsNSUN1  C D V P C S G D G T I R K G H D M W R K W N S G M G N G L H L L Q V D I S M R G I A L L K V G G R M V Y S T C S M N P
OsNSUN2  C D V P C S G D G T V R K A P D M W R K W N A G M G N G L H R L Q V E I A M R G I G L L K V G G R I V Y S T C S M N P

AtTRM4F  L D A P C S A L G L R P R L F A G L E T ----- V V S L R --- N H G W ----- Y Q R K M L D Q A V Q L V R V G G --- I L V Y S T C T I N
AtTRM4G  V D A E C T H D G S I K H I K F E Q W G ----- W K T L E R R V L D A E R T D T N L K ----- A L Q L N L R N G F R L L K E A G --- T L V Y S T C S L T
AtTRM4H  L D P S C S G S G T I T D R L D H L L P S ----- H S E D N M N Y D S M R L H K L A V ----- F Q K K A L A H A L S F P K V E R --- V V Y S T C S I Y
PagTRM4F-a L D A P C S A L G L R P R L F T G E V T ----- I D S L K --- K H A T ----- Y Q R R M F D Q A V K L V R P G G --- V I V Y S T C T I N
PagTRM4F-b L D A P C S A L G L R P R L F T G E N P R I G G P L V G S F E S A N G R T E E ----- W L R P G E E E F V Q R F D P S S S L D T I G F F I A K F S
PagTRM4G-a V D A E C T H D G S I R H I Q K F E H W G ----- W E T L N G R V L N A E R S D - N L T ----- A L Q L K L L I N G F R L L R V G G --- S L V Y S T C S L T
PagTRM4G-b V D A E C T H D G S I R H I Q K F E H W G ----- W E T L N G R V L N A E R S D - N L T L Q V T D L L F H Y L R H F L L Q L K L L I N G F R L L R V G G --- S L V Y S T C S L T
OsNSUN3  V D A E C T H D G S I K H I K F E F W G ----- W K T L D R R V L D A E R T D D L L H ----- L Q L R L L T N G F K L L K T G G --- S L V Y S T C R * -
OsNSUN6  L D A P C S A L G L R P R L F A G E E T ----- L E S L R --- N H A T ----- Y Q R R M F D Q A V K L V H P G G --- V I V Y S T C T I N

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**Fig. S3.** Amino acid sequence alignment of TRM4 homologs. Related to Figure 2. Amino acid sequences were aligned using MEGA. The red boxes indicate methyltransferase activity sites respectively.