



Supplementary figure 1. Alignment of SMUG1 orthologues. Species are arranged in descending order of sequence similarity to *Homo sapiens* SMUG1. Gaps and missing residues are denoted by dashes. Secondary structure of xSMUG1 is illustrated above the alignment. Accession numbers of each species are as follows: Hs (*Homo sapiens*) AAL86910.1; Pt (*Pan troglodytes*) XP_509109.1; Mm (*Mus musculus*) Q6P5C5; Bt (*Bos Taurus*) Q59I47; Rn (*Rattus norvegicus*) Q811Q1; Cf (*Canis familiaris*) XP_543623.2; Tn (*Tetraodon nigroviridis*) CAF95523.1; XI (*Xenopus laevis*) Q9YGN6; Gm (*Geobacter metallireducens* GS-15) YP_383069.1; AE (*Azoarcus* sp. EbN1) YP_158606.1; Ci (*Ciona intestinalis*) AK115076.1; Sp (*Strongylocentrotus purpuratus*) XP_782746.1; Rb (*Rhodopirellula baltica* SH 1) NP_869403.1; Tc (*Tribolium castaneum*) XP_971699.1; Ag (*Anopheles gambiae* str. PEST) XP_312038.2; Am (*Apis mellifera*) XP_396883.2; Dm (*Drosophila melanogaster*) NP_650609.1; Dp (*Drosophila pseudoobscura*) EAL27349.1.