

**Figure S1.** TEM images 8 cross (a-h) and 3 longitudinal (i-k) sections of PC+CA complexes in spermatozoa of fertile donor; l and m 3D reconstruction of PC+CA complex of fertile donor (two different angle of view). Scale bar 200 nm.



**Figure S2.** TEM images of PC+CA complexes. (a - c) Class I spermatozoa from D1. (d) Class I spermatozoid from P2. (e, f) Class II spermatozoa from D1. (g, h) Class II spermatozoa from P2. (i) Class III spermatozoid from D1. (j - l) Class III spermatozoa from P2. Scale bar 200 nm.



**Figure S3.** TEM images of PC+CA complexes. (a - c) Class IV spermatozoa from P1. (d) Class IV spermatozoa from P2. (e - h) Class V spermatozoa from P1. Scale bar 200 nm.