

Supplementary Materials

Supplementary 1: Composition of sperm TALP-HEPES and modification of the composition for each treatment. Basal TALP-HEPES maintains the basal condition of sperm samples without generating any physiological modification to induce capacitation. CAP.BUFFER includes 2.0mM of CaCl₂ for activating capacitation by the calcium pathway. MT corresponds to TALP-HEPES and 10 µgGAE mL⁻¹ of MT-Ex. MT + CAP.BUFFER contains the same characteristic of capacitating buffer but includes 10µgGAE mL⁻¹ of extract to evaluate the calcium response in sperm samples.

Reagent	BASAL: TALP- HEPES medium	CAP. BUFFER: TALP-HEPES + Calcium and BSA	MT + CAP.BUFFER: TALP-HEPES + Calcium, BSA and MT-Ex	MT: TALP-HEPES medium + MT-Ex
Glucose	6 mM	5mM	5mM	6 mM
NaCl	113 mM	100mM	100mM	113 mM
KCl	2.7 mM	3.1mM	3.1mM	2.7 mM
CaCl₂	-	2.0mM	2.0mM	-
MgCl₂	0.5 mM	0.4mM	0.4mM	0.5 mM
NaH₂PO₄	0.4 mM	0.3mM	0.3mM	0.4 mM
NaHCO₃	20 mM	15mM	15mM	20 mM
Pyruvate	3,1 mM	1.0mM	1.0mM	3,1 mM
Lactate	20 mM	21.7mM	21.7mM	20 mM
HEPES	20 mM	20mM	20mM	20 mM
BSA	-	0.3% (wt/vol)	0.3% (wt/vol)	-
mosm/kg	290-300	290-300	290-300	290-300
pH	7.4	7.4	7.4	7.4
Murtilla Extract (MT-Ex)			0.315µgGAE mL ⁻¹	0.315µgGAE mL ⁻¹