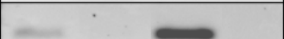
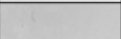
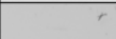
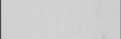
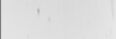
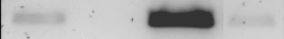
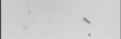
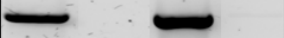
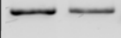
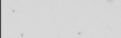


method	homogenization	Trizol®				RNeasy™		Trizol®/ RNeasy™	
		SC/RS		MD		MD		SC/RS	
		DNase							
		-	+	-	+	-	+	-	+
hCol2A1 (106 bp)	-								
	+								
Aggr* (111 bp)	-								
	+								
GAPDH (254bp)	-								
	+								
Col2A1* (606 bp)	-								
	+								
RNAse									

Additional file 6. **Quality control of total RNA from human cartilage explants from one typical donor using RT-PCR.** Total RNA was isolated using different homogenization options (SC: scalpel; RS: rotor-stator; MD: microdismembrator) and different extraction procedures (TRIzol® reagent and / or RNeasy Mini™ kit; with or without DNase-treatment). The quality of human cartilage RNA was assessed by rt-PCR amplification of different genes. Total RNA was reverse transcribed into cDNA and amplification of human collagen Type II (hCol2A1; short PCR product size), aggrecan (Aggr; short PCR product, intron-spanning primer), the housekeeping gene glyceralaldehyde 3-phosphate dehydrogenase (GAPDH, middle PCR product) and collagen Type II (Col2A1, intron-spanning primer, long PCR product) was performed. As controls, RNA was pre-treated with RNase A before the first-strand synthesis, and the reverse transcriptase was omitted. PCR products were visualized by gel electrophoresis.