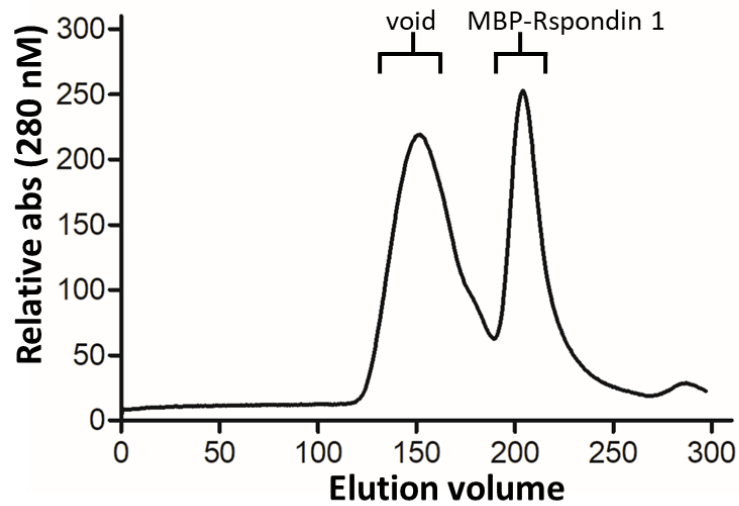


SUPPLEMENTAL FIGURES. Organoid culture media formulated with growth factors of defined cellular activity.

Manuela Urbischek, Helena Rannikmae, Thomas Foets, Katharina Ravn, Marko Hyvönen and Marc de la Roche

**Supplemental Figure 1. Elution of MBR-R-spondin 1 from the SEC column.** NiNTA-purified MBP-R-spondin 1 was subject to a disulphide shuffling step, concentrated to 15 ml and applied to a 200 µg 16/600 SEC column. MBP-R-spondin 1 eluted in two peaks, measured by UV absorbance of 280 nm – a peak centred at 150 ml elution volume corresponding to high molecular weight aggregates and a peak centred on 210 ml elution volume corresponding to active MBP-R-spondin 1.



**Supplemental Figure 2. Full SDS-PAGE gel of purified fractions from the preparation of R-spondin 1 and Gremlin 1.**

