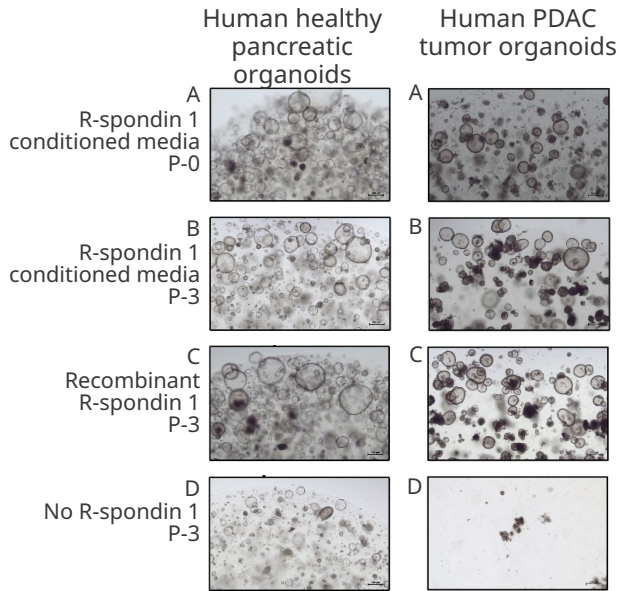


Recombinant R-spondin 1 can replace conditioned media in pancreatic organoid culture

R-spondin 1 (Qk006)



Comparison between human healthy pancreatic organoids and human PDAC tumor organoids.

Initial cultures maintained in full growth media supplemented with Wnt3a R-spondin 1 conditioned media (P-0, A). Cultures were then continued in R-spondin 1 conditioned media (B), growth media with 100 nM recombinant R-spondin 1 (Qk006, C), or growth media alone (D).

Human R-spondin 1 protein (RSPO1) is the prototypic member of the R-spondin family. R-spondin 1 is used to potentiate Wnt signaling in many organoid culture systems.

Conditioned media from R-spondin 1 expressing cell lines is a common source of R-spondin 1. However, conditioned media is a major source of intra- and inter-lab variability. Recombinant proteins can provide a low variability alternative to conditioned media.

▶ Healthy human pancreatic organoids and pancreatic ductal adenocarcinoma (PDAC) organoids were cultured with either Wnt-3a conditioned media or growth media supplemented with recombinant R-spondin 1 (Qk006).

▶ Organoid phenotype was maintained when Wnt-3a conditioned media was replaced with recombinant R-spondin 1 protein.

Recombinant R-spondin 1 protein (Qk006) is comparable to Wnt-3a stimulated R-spondin 1 conditioned media in supporting the growth of pancreatic organoids and PDAC tumor organoids. Qkine growth factors have high lot-to-lot consistency, reducing variability introduced by the use of conditioned media.

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