## Supplementary table 1: Organoid medium composition for human gastric organoids.

ROCK inhibitor was added only after the initial seeding and passaging of the organoids. For basal medium (AD++), Advanced Dulbecco's modified Eagle medium (DMEM)/F12 supplemented with 10 mmol/l HEPES and GlutaMAX 1 X was used. CM: conditioned medium; inh.: inhibitor; N-Ac: N-acetylcysteine; EGF: epidermal growth factor; FGF-10: fibroblast growth factor-10; TGF- $\beta$ : transforming growth factor- $\beta$ ; ROCK: Rho-associated coiled-coil forming protein serine/threonine kinase.

Reagent		Supplier	Catalog number	
Organoid maintenance				
Matrigel		Corning	356231	
Basal medium (AD++)				
HEPES		Invitrogen	15630-056	
GlutaMAX-I		Invitrogen	35050-079	
Advanced DMEM/F12 (AD)		Invitrogen	12634-028	
Medium components				
Reagent	Supplier		Catalog number	Final concentration
AD++				30%
WNT CM	Stable cell line			50%
R-Spondin CM	Stable cell line			10%
Noggin CM	Stable cell line			10%
Primocin	Invivogen		Ant-pm-1	100 μg/ml
B27	Invitrogen		12587-010	1 X
N-Ac	Sigma-Aldrich		A9165-5G	1.25 mM
EGF	Peprotech		AF-100-15	50 ng/ml
FGF-10	Peprotech		100-26	100 ng/ml
Gastrin-I	Tocris		3006	1 nM
TGF-β inh. (A-83-01)	Tocris		2939	2 μΜ
ROCK-inh (Y-27632)	AbMole Bioscience		M1817	10 μM