

Materials List for

Single-Cell Suspension Preparation from Nile Tilapia Intestine for Single-Cell Sequencing

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Materials

Name	Company	Catalog Number	Comments
0.22-µm Sterile Filter	Solarbio Life Sciences	SLGV033RB	It is used to filter and sterilize the enzyme solution.
40-µm Cell Strainer	Solarbio Life Sciences	F8200	Cell Strainer is applied to eliminate undigested tissue pieces.
Bovine serum albumin (BSA)	Sigma-Aldrich	SRE0098	Powder; dilute 0.04 g BSA with 100 mL 1× DPBS to prepare 0.04% BSA-DPBS washing buffer. Store at 2 - 8 °C.
Collagenase II	Sangon Biotech	A004202	Dilute with PBS to a final concentration of 1 mg/mL.
Collagenase/dispase	Roche	10269638-001	Dilute with PBS to a final concentration of 1 mg/mL.
Dispase	Sigma-Aldrich	D4818	Dilute with PBS to a final concentration of 1 mg/mL.
DNase I	Sigma-Aldrich	AMPD1	DNase I helps reduce cell clumping.
Dulbecco's phosphate-buffered saline (DPBS), Ca ²⁺ /Mg ²⁺ -free	Solarbio Life Sciences	E607009-0500	Store at room temperature.
Elastase	Sangon Biotech	A600438	Dilute with PBS to a final concentration of 0.5 mg/mL.
Fetal bovine serum (FBS)	Gibco	16000-044	Serum, used at volume of 5% in digestion solution.
Inverted Microscope	Leica	qTOWER3G	It is used to examine cell viability.
Liberase	Roche	5401119001	Dilute with PBS to a final concentration of 0.25 mg/mL.
Nile tilapia (<i>Oreochromis niloticus</i>)	ProGift Aquaculture Technology Co. Ltd.	NA	Healthy fish with no disease signs (Mean body weight: 100 g).
Phosphate-buffered saline (PBS)	Solarbio Life Sciences	P1020	Store at room temperature.
Refrigerated Centrifuge	Eppendorf	5424	It is used to spin down the tissue and cell pellet.

RNase inhibitor	NEB	M0314L	Inhibit RNase activity
Solid-phase RNase-Be-Gone Reagent	Sangon Biotech	B644201-0050	It is used to remove the RNase from tools such as dissecting scissors and glass pipettes. Store at room temperature.
Tricaine methanesulfonate (MS-222)	Sigma-Aldrich	E10521	For fish euthanasia.
Trypan Blue	Invitrogen	C0040	It is used for staining dead cells.
Trypsin	Sangon Biotech	E607001	Dilute with PBS to a final concentration of 1 mg/mL.