

EXPERIMENT CHECKLIST FOR Stereo-seq OMNI FFPE SOLUTIONS

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE block slicing, section scooping and section baking - for the same item, please choose from either one of the recommended brands						
Microtome	Equipment	Hand-operated rotary slicer	Leica	HistoCore BIOCUT	Or other equipment that can perform paraffin sectioning	<input type="checkbox"/>
		Dakota is a rotary slicer	Dakewe	MT1		
Microtome blade	Equipment	Feather Microtome Blade	FEATHER	R35		<input type="checkbox"/>
		Low-profile Blades Disposable 819	Leica	819		
Slide warmer/dryer	Equipment	/	/	/	Needs to satisfy the following temperatures: 42 ° C; 37 ° C; 60 ° C	<input type="checkbox"/>
Water Bath	Equipment	Tissue Floating Bath, Lighted	Geyer	194242	35 ° C ~ 48 ° C	<input type="checkbox"/>
PCR Thermal Cycler	Equipment	PROFLEX™ PCR 3X 32-well PCR system	Applied biosystem	4484073	Need Stereo-seq PCR Adaptor	<input type="checkbox"/>
		T100™ PCR instrument	Bio-Rad	1861096		
Forceps	Consumable	Forceps	Deli	DL396003	Straight-tipped forceps	<input type="checkbox"/>
Dust-free paper	Consumable	Kimtech dust-free wipe paper	KIMBERLY (KIMTECH)	0130-10		<input type="checkbox"/>
Microscope Slide	Consumable	The surface is positively charged and adheres to the slide	CITOTEST	80302-3161-16		<input type="checkbox"/>
Blade	Consumable	One-sided security blade	FLYING EAGLE BRAND	137011		<input type="checkbox"/>
Anhydrous ethanol	Reagent	Anhydrous ethanol (CAS: 64-17-5)	XILONG Scientific	1280340101601	Or other brands, AR purity	<input type="checkbox"/>
Slide Box	Consumable	5-piece mail folder	Beyotime	FBX005	Or other brands	<input type="checkbox"/>
Other reagents and consumables without recommended brands - for FFPE block slicing, section scooping and section baking.						
Large containers for holding liquids						<input type="checkbox"/>
ddH ₂ O/Milli-Q Water						<input type="checkbox"/>
Cardstock paper						<input type="checkbox"/>
Ice Box, or cooling station (e. g. Leica cooling station HistoCore Arcadia C)						<input type="checkbox"/>
Histology brushes						<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE block quality test (DV200) - for the same item, please choose from either one of the recommended brand						
RNA quality control-Agilent	Equipment	2100 bioanalyzer/Agilent 2100	Agilent	5065-4401	Agilent or QSEP	<input type="checkbox"/>
	Equipment	Ika Vortex Mixer	IKA			
	Kit	Agilent RNA 6000 Pico	Agilent	5067-1513		
RNA Quality Control-Qsep	Equipment	QSEP high-throughput biological fragment analyzer	Bioptic Inc.	Qsep400		<input type="checkbox"/>
	Kit	RNA Kit (R 1)	Bioptic Inc.	C105110/C105210/ C105810		
High speed microcentrifuge	Equipment	Microcentrifuge	Eppendorf	5418R/5420/ 5425/5425R	Or other similar equipment	<input type="checkbox"/>
RNA extraction kit	Kit	RNeasy FFPE Kit (50)	Qiagen	73504		<input type="checkbox"/>
Paraffin wax remover	Reagent	Deparaffinization Solution	Qiagen	19093		<input type="checkbox"/>
RNase decontamination reagent	Reagent	RNaseZap RNase Decontamination Solution	Thermo Fisher Scientific	AM9780		<input type="checkbox"/>
Nuclease-free water	Reagent	Nuclease-free water (not DEPC-treated)	Thermo Fisher Scientific	AM9937		<input type="checkbox"/>
RNA Quantification	Equipment	NanoDrop Eight photometer	Thermo Fisher Scientific	NanoDrop Eight	Contains supporting software	<input type="checkbox"/>
1.5 mL DNase/RNase Free centrifuge tube	Consumable	1.5 mL DNase/RNase Free centrifuge tube	Eppendorf/Axygen	-		<input type="checkbox"/>
2.0 mL DNase/RNase Free centrifuge tube	Consumable	2.0 mL DNase/RNase Free centrifuge tube	Eppendorf/Axygen	-		<input type="checkbox"/>
1000 µL pipette tips	Consumable	1000 µL suction	Eppendorf/Axygen	-		<input type="checkbox"/>
200 µL pipette tips	Consumable	200 µL suction head	Eppendorf/Axygen	-		<input type="checkbox"/>
10 µL pipette tips	Consumable	10 µL suction	Eppendorf/Axygen	-		<input type="checkbox"/>
Other reagents and consumables without recommended brands - for FFPE block quality test (DV200)						
EP tube rack						<input type="checkbox"/>
Metal Bath (for heating 1.5 mL centrifugal tube)						<input type="checkbox"/>
Vortex oscillator						<input type="checkbox"/>
Handheld centrifuge						<input type="checkbox"/>
Pipettes (1000µL; 200µL; 10µL; 2.5µL)						<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE section dewaxing - for the same item, please choose from either one of the recommended brands						
Slide warmer/dryer	Equipment	/	/	/	Needs to satisfy the following temperatures: 42 ° C; 37 ° C; 60 ° C	<input type="checkbox"/>
Slide Box	Consumable	For holding or storing glass slides	Beyotime	FBX005	Instead, use a 50 mL centrifuge tube	<input type="checkbox"/>
Dust-free paper	Consumable	Kimtech dust-free wipe paper	KIMBERLY(KIMTECH)	0130-10		<input type="checkbox"/>
Deparaffinization agent	Reagent	Environmental Dewaxing agent Histo-clear	HEAD(BeiJing) Biotechnology	H6025		<input type="checkbox"/>
		Environmental organization transparent dewaxing agent	Solarbio	G2150		
Anhydrous ethanol	Reagent	Anhydrous ethanol (CAS: 64-17-5)	XILONG Scientific	1280340101601	Or other brands, AR purity	<input type="checkbox"/>
Other reagents and consumables without recommended brands - for FFPE section dewaxing						
Slides staining jar	Consumable	Staining jar that can hold 5-10 slides	/	-	Or similar consumables	<input type="checkbox"/>
ddH ₂ O/Milli-Q Water						<input type="checkbox"/>
EP Tube Rack						<input type="checkbox"/>
50 mL centrifugal rack						<input type="checkbox"/>
50 mL centrifuge tube						<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE section H&E staining - for the same item, please choose from either one of the recommended brands						
Hematoxylin	Reagent	Mayer hematoxylin	Solarbio	G4470	Mayer	<input type="checkbox"/>
		Hematoxylin solution according to Mayer	Sigma	51275		
Bluing reagent	Reagent	Dako Bluing Buffer	Dako	S3309		<input type="checkbox"/>
Eosin	Reagent	Eosin y Solution (Modified Alcoholic)	Abcam	AB246824		<input type="checkbox"/>
Anhydrous ethanol	Reagent	Anhydrous ethanol (CAS: 64-17-5)	XILONG Scientific	1280340101699	Or other brands, AR purity	<input type="checkbox"/>
20X SSC	Reagent	Ambion 20X SSC, no RNase	Invitrogen	AM9770		<input type="checkbox"/>
Nuclease-free water	Reagent	Nuclease-free water (not DEPC-treated)	Thermo Fisher Scientific	AM9937		<input type="checkbox"/>
Compressed air duster	Reagent	Air Duster	Vlogger	-	For blow-drying chips	<input type="checkbox"/>
Slide Box	Consumable	5-piece mail folder	Beyotime	FBX005		<input type="checkbox"/>
Cover slip	Consumable	Cover slip	CITOTEST	10212450C		<input type="checkbox"/>
Dust-free paper	Consumable	Kimtech dust-free wipe paper	KIMBERLY(KIMTECH)	0130-10		<input type="checkbox"/>
Other reagents and consumables without recommended brands - for FFPE H&E staining						
50 mL centrifuge tube						<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE section decolorization & decrosslinking - for the same item, please choose from either one of the recommended brands						
PCR Thermal Cyclers	Equipment	PROFLEX PCR 3X 32-well PCR system	Applied biosystem	4484073		<input type="checkbox"/>
		T100™ PCR instrument	Bio-Rad	1861096		
TE buffer (pH 9.0)	Reagent	Tris-EDTA antigen repair solution (1X) pH 9.0	Solarbio	C1037		<input type="checkbox"/>
1000 µL pipette tips	Consumable	1000 µL suction	Eppendorf/Axygen	-		<input type="checkbox"/>
200 µL pipette tips	Consumable	200 µL suction head	Eppendorf/Axygen	-		<input type="checkbox"/>
Slide Box	Consumable	5-piece mail folder	Beyotime	FBX005		<input type="checkbox"/>
20X SSC	Reagent	Ambion® 20X SSC, RNase-free	Invitrogen	AM9770		<input type="checkbox"/>
Dust-free paper	Consumable	Kimtech dust-free wipe paper	KIMBERLY(KIMTECH)	0130-10		<input type="checkbox"/>
Other reagents and consumables without recommended brands - for FFPE section decolorization & decrosslinking						
Pipettes (1000µL; 200µL; 10µL; 2.5µL)						<input type="checkbox"/>
Slides staining jar	Consumable	Staining jar that can hold 5-10 slides	/	-		<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE ssDNA staining - for the same item, please choose from either one of the recommended brands						
Nuclear staining reagent	Kit	Qubit ssDNA Assay Kit	Invitrogen™	Q10212		<input type="checkbox"/>
20X SSC	Reagent	Ambion® 20X SSC, no RNase	Invitrogen™	AM9770		<input type="checkbox"/>
Nuclease-free water	Reagent	Nuclease-free water (not DEPC-treated)	Thermo Fisher Scientific	AM9937		<input type="checkbox"/>
Slide Box	Consumable	5-piece mail folder	Beyotime	FBX005		<input type="checkbox"/>
Cover slip	Consumable	Microscope cover	CITOTEST	10212450C		<input type="checkbox"/>
Dust-free paper	Consumable	Kimtech dust-free wipe paper/delicate task wipes	KIMBERLY(KIMTECH)	0130-10		<input type="checkbox"/>
Other reagents and consumables without recommended brands - for FFPE ssDNA staining						
Pipettes (1000µL; 200µL; 10µL; 2.5µL)						<input type="checkbox"/>
Petri dish						<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE decrosslinking (post ssDNA staining) - for the same item, please choose from either one of the recommended brands						
20X SSC	Reagent	Ambion® 20X SSC, no RNase	Invitrogen™	AM9770		<input type="checkbox"/>
Slide Box	Consumable	5-piece mail folder	Beyotime	FBX005	Or, use a 50 ml centrifuge tube	<input type="checkbox"/>
Other reagents and consumables without recommended brands - for FFPE decrosslinking (post ssDNA staining)						
Slide staining jar	Consumable	Staining jar that can hold 5-10 slides	/	-		<input type="checkbox"/>
Pipettes (1000µL; 200µL; 10µL; 2.5µL)						<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE tissue fixation - for the same item, please choose from either one of the recommended brands						
Methanol	Reagent	Methanol AR500mL (CAS: 67-56-1)	XILONG Scientific	1280100101600	Or other brands, AR purity	<input type="checkbox"/>
Slide Box	Consumable	5-piece mail folder	Beyotime	FBX005	50mL centrifuge tube can be used instead	<input type="checkbox"/>
Dust-free paper	Consumable	Kimtech dust-free wipe paper	KIMBERLY(KIMTECH)	0130-10		<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE tissue permeabilization - for the same item, please choose from either one of the recommended brands						
PCR Thermal Cycler	Equipment	PROFLEX PCR 3X 32-well PCR system	Applied biosystem	4484073		<input type="checkbox"/>
		T100™ PCR instrument	Bio-Rad	1861096		
Hydrochloric acid	Equipment	Hydrochloric acid solution (CAS: 7647-01-0)	Sigma	Safs 2104-50 mL		<input type="checkbox"/>
		Hydrochloric acid	SINOPHARM	7647-01-0		
Nuclease-free water	Reagent	Nuclease-free water (not DEPC-treated)	Thermo Fisher Scientific	AM9937		<input type="checkbox"/>
1.5 mL DNase-/RNase-free centrifuge tube	Consumable	1.5 mL DNase-/RNase-free centrifuge tube	Eppendorf/Axygen	-		<input type="checkbox"/>
1000 µL Pipette Tips	Consumable	1000 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>
200 µL Pipette Tips	Consumable	200 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>
10 µL Pipette Tips	Consumable	10 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>
Other reagents and consumables without recommended brands-for FFPE tissue permeabilization						
Pipettes (1000µL; 200µL; 10µL; 2.5µL)						<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE mix overnight reaction - for the same item, please choose from either one of the recommended brands						
PCR Thermal Cycler	Equipment	PROFLEX PCR 3X 32-well PCR system	Applied biosystem	4484073		<input type="checkbox"/>
		T100™ PCR instrument	Bio-Rad	1861096		
1.5 mL DNase-/RNase-free centrifuge tube	Consumable	1.5 mL enzyme-free centrifuge tube	Eppendorf/Axygen	-		<input type="checkbox"/>
1000 µL Pipette Tips	Consumable	1000 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>
200 µL Pipette Tips	Consumable	200 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>
10 µL Pipette Tips	Consumable	10 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>
Other reagents and consumables without recommended brands - for FFPE mix overnight reaction						
Pipettes (1000µL; 200µL; 10µL; 2.5µL)						<input type="checkbox"/>

Purpose	Category	Description	Recommended brand	Cat. No.	Notes	Checkbox
For FFPE cDNA release & cDNA amplification - for the same item, please choose from either one of the recommended brands						
DNA Quantification	Kit	Qubit dsDNA Quantification Assay kit	Invitrogen™	Q32854		
	Equipment	Qubit 4 fluorometer	Invitrogen™	Q33238		<input type="checkbox"/>
	Consumable	Qubit Assay tube	Invitrogen™	Q32856		
cDNA library detection-Agilent	Equipment	2100 bioanalyzer/Agilent 2100	Agilent	5065-4401		
	Equipment	IKA Vortex Mixer	IKA			<input type="checkbox"/>
	Kit	Bioanalyzer High Sensitivity DNA Analysis	Agilent	5067-4626	Agilent or Qsep	
cDNA library detection-Qsep	Equipment	QSEP high-throughput biological fragment analyzer	BiOptic Inc.	QSEP400		<input type="checkbox"/>
	Kit	High Sensitivity Cartridge Kit (N1)	BiOptic Inc.	C105105/C102205		
Metal Bath	Equipment	Mini Metal Bath (MJY-100D)	Absin	ABS72022-1EA	For 37 ° C and 55 ° C heating; Or other similar devices	<input type="checkbox"/>
SPRI Beads	Reagent	Agencourt AMPure XP 450mL Kit	Beckman	A63882		<input type="checkbox"/>
	Reagent	Vahts DNA Clean Beads	Vazyme	N411-01/N411-02/ N411-03		<input type="checkbox"/>
Magnetic separation rack(2.0 mL)	Consumable	DynaMag™ -2 Magnetic separation rack	Invitrogen™	12321D	Or other consumables of the same type	<input type="checkbox"/>
Magnetic separation rack (0.2 mL)	Consumable	NEBNext Magnetic separation rack	NEB	S1515s	Or other consumables of the same type	<input type="checkbox"/>
Nuclease-free water	Reagent	Nuclease-free water (not DEPC-treated)	Thermo Fisher Scientific	AM9937		<input type="checkbox"/>
Anhydrous ethanol	Reagent	Absolute ethyl alcohol (CAS: 64-17-5)	XILONG Scientific	1280340101601	Or other brands, AR purity	<input type="checkbox"/>
2.0 mL DNase-/RNase-Free centrifuge tube	Consumable	2.0 mL enzyme-free centrifuge tube	Eppendorf/Axygen	-		<input type="checkbox"/>
1.5 mL DNase-/RNase-Free centrifuge tube	Consumable	1.5 mL enzyme-free centrifuge tube	Eppendorf/Axygen	-		<input type="checkbox"/>
PCR tube (0.2 mL)	Consumable	Axygen PCR cassette tube	Axygen	PCR-0208-AD-C	Or other enzyme-free PCR tubes	<input type="checkbox"/>
1000 µL Pipette Tips	Consumable	1000 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>
200 µL Pipette Tips	Consumable	200 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>
10 µL Pipette Tips	Consumable	10 µL Pipette Tips	Eppendorf/Axygen	-		<input type="checkbox"/>

Other reagents and consumables without recommended brands -for FFPE cDNA release & cDNA amplification

PCR Thermal Cycler (any PCR Thermal Cycler that can be used for routine nucleic acid amplification)

Pipettes (1000 μ L; 200 μ L; 10 μ L; 2.5 μ L)