

# A Protocol for Immunohistochemistry and RNA *In-situ* Distribution within Early *Drosophila* Embryo

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jove.com/video/61776

## Materials

Name	Company	Catalog Number	Comments
-20°C Refrigerator	Meiling Biology &Medical	DW-YL270	Used for reagent storage
-80°C Ultra low temperature refrigerator	Thermo	Forma 90 Series	Used for reagent storage
Agar	Sigma-Aldrich	WXBB6360V	Preparation of grape juice agar plates
Anti-Digoxigenin-AP, Fab fragments	Roche	11093274910	For the detection of digoxigenin-labeled compound
Biochemical incubator	Shanghai Bluepard Instruments	LRH-250	<i>In-situ</i> Hybridization
Bouin's solution	Sinopharm Chemical Reagent at Beijing	69945460	<i>Drosophila</i> Embryo Embedding
Centrifuge	Eppendorf	540BH07808	<i>In-situ</i> Hybridization
Centrifuge tube	Denville	C-2170	<i>Drosophila</i> Embryo Collection
Chrome Alum	Sinopharm Chemical Reagent at Beijing	10001018	Coating Slides
Constant temperature water bath	Jintan Henfeng Instruments	KW-1000DC	Hematoxylin-Eosin Staining, Immunohistochemistry, <i>In-situ</i> Hybridization and Periodic Acid-Silver Methenamine Staining
Dako REAL EnVision Detection System	Dako	K5007	In immunohistochemical reaction or <i>in situ</i> hybridization reaction, it binds to the primary antigen antibody, and the target is labeled by staining.
DEPC	Sigma-Aldrich	D5758	<i>In-situ</i> Hybridization
DIG RNA Labeling Kit	Roche	11093274910	RNA labeling with diagoxygenin-UTP by <i>in vitro</i> transcription with SP6 and T7 RNA polymerase

<i>Drosophila melanogaster</i>	Bloomington Stock Center	BDSC_16799, BDSC_19894, BDSC_11664	The stocks of <i>Drosophila melanogaster</i> mutant
Electric blast drying oven	Tianjin Taiste Instruments	101-0AB	For coating slides and paraffin embedding
Eosin	Sigma-Aldrich	230251	Hematoxylin-Eosin Staining
Ethanol	Sinopharm Chemical Reagent at Beijing	100092680	Paraffin Embedding, Hematoxylin-Eosin Staining, Immunohistochemistry, In-situ Hybridization and Periodic Acid-Silver Methenamine Staining
Gelatin	Sinopharm Chemical Reagent at Beijing	10010328	Coating Slides
Gold chloride	Sigma-Aldrich	379948	Periodic Acid-Silver Methenamine Staining
Hematoxylin	Sigma-Aldrich	H3136	Hematoxylin-Eosin Staining
High Pure PCR Product Purification Kit	Roche	11732668001	For purification of PCR products
Intelligent constant temperature and humidity box	Ningbo Jiangnan Instruments	HWS	For fly maintenance
LE Agarose	HyAgarose	14190108029	Pre-embedding
Methanol	Sinopharm Chemical Reagent at Beijing	10014108	Drosophila Embryo Collection
Microscope	ZEISS	Observer.A1	Hematoxylin-Eosin Staining, Immunohistochemistry, In-situ Hybridization and Periodic Acid-Silver Methenamine Staining
Microscope Slides	MeVid Labware Manufacturing	P105-2001	Coating Slides
Neutral Gum	Sinopharm Chemical Reagent at Beijing	10004160	Hematoxylin-Eosin Staining
N-heptane	Sinopharm Chemical Reagent at Beijing	40026768	Drosophila Embryo Collection
Paraffin slicer	Huahai science instrument	HH-2508III	<i>In-situ</i> Hybridization
Paraffin	Sinopharm Chemical Reagent at Beijing	69019461	Paraffin Embedding
pH/mV Meter	Sartorius	PB-10	For determining the pH value of a solution
Silver nitrate	Sinopharm Chemical Reagent at Beijing	10018461	Periodic Acid-Silver Methenamine Staining
Ultrapure water meter	Thermo	AFXI-0501-P	<i>In-situ</i> Hybridization
Xylene	Sinopharm Chemical Reagent at Beijing	10023418	Paraffin Embedding