

Fee Structure - Molecular Biology

Experimental Description	Reagents needed	Reagent Description	Vendor and #	List (no shipping) Cost and unit	Amount needed/unit	Cost/unit processed
RNA isolation using Tri-Reagent (unit is per sample)	Tri-Reagent		MRC; TR-118	\$108.00 for 100ml	1ml	\$1.08
	1-bromo-3-chloropropane (BCP)		MRC; BP151	\$27.00 for 200ml	0.1ml	\$0.02
	Isopropanol		Fisher; AC327270010	\$73.06 for 1L	0.5ml	\$0.04
	Absolute Ethanol		Fisher; BP2818500	\$37.99 for 500ml	1ml (75%)	\$0.06
	Nuclease Free Water		Fisher; NC9630308	\$184.87 for 4L	0.25ml	\$0.02
	Snap cap tubes		Fisher; 14-959-11A	\$70.21 for 500 tubes	1 tube	\$0.14
	Tips- 0.1-10ul		VWR; 89140-160	\$37.75 for 10 racks	see column I	\$1.02 estimate 2 racks of 1000ul tips
	Tips- 1-200ul		VWR; 89140-936	\$37.75 for 10 racks		and 0.5 rack of 200ul tips per 24 isolations
	Tips- 101-1000ul		VWR; 89217-468	\$90.33 for 8 racks		
	Nuclease free microfuge tubes		VWR; 10011-722	\$21.00 for 500 tubes	2 tubes	\$0.08
	DNase		Invitrogen; AM1906	\$90.50 for 50 rxns	1 rxn	\$1.81
	Gloves		VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
	Conical (50ml)		VWR; 430829	\$107.31 for 500 conicals	2 conicals	\$0.43
				Total/sample		\$4.98
				without DNase		\$3.17
RNA + Protein isolation- Tri-Reagent (unit is per sample)	All RNA reagents					\$4.98
	guanidine hydrochloride		VWR; BDH4504-250GP	\$35.68 for 250g	0.08g	\$0.01
	Ethanol		Fisher; BP2818500	\$37.99 for 500ml	2.85ml	\$0.23
	glycerol		VWR; BDH4154-500ml	\$30.38 for 500ml	0.075ml	\$0.01
	Acetone		VWR; E646-500ml	\$11.14 for 500ml	1.5ml	\$0.03
	Nuclease free microfuge tubes		VWR; 10011-722	\$21.00 for 500 tubes	2 tubes	\$0.08
	Tips- 101-1000ul		VWR; 89217-468	\$90.33 for 8 racks	0.2 racks	\$2.26
	Gloves		VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
	Conical (50ml)		VWR; 430829	\$121.39 for 500 conicals	2 conicals	\$0.49
				Cost just for protein isol.		\$4.47
				Total/sample		\$8.37
				without DNase		\$6.56
RNA + Protein + DNA - Tri-Reagent (unit is per sample)	All RNA reagents					\$4.98
	All Protein reagents					\$4.47
	Nuclease free microfuge tubes		VWR; 10011-722	\$21.00 for 500 tubes	2 tubes	\$0.08
	Absolute Ethanol		Fisher; BP2818500	\$37.99 for 500ml	4ml	\$0.32
	Sodium Citrate		VWR; 97061-008	\$16.25 for 500g	0.06g	\$0.01
	Conical (50ml)		VWR; 430829	\$106.46 for 500 conicals	1 conical	\$0.22
	Gloves		VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
	Tips- 101-1000ul		VWR; 89217-468	\$90.33 for 8 racks	0.2 racks	\$2.26
				Cost just for DNA isol.		\$4.25
				Total/sample		\$12.62
				without DNase		\$10.81
RNA Isolation - RNAEasy Mini- Qiagen	Kit		Qiagen; 74104	\$306.32 for 50 Rxns	1 rxn	\$6.13
	Qiashredder		Qiagen; 79654	\$347.16 for 250	1 shredder	\$1.39
	Gloves		VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
	Tips- 101-1000ul		VWR; 89217-468	\$90.33 for 8 racks	0.1 rack	\$1.13
				Total/sample		\$8.93
RNA + Protein + DNA- All Prep- Qiagen	Kit		Qiagen; 80004	\$536.83 for 50	1 rxn	\$10.74
	Qiashredder		Qiagen; 79654	\$347.16 for 250	1 shredder	\$1.39
	Gloves		VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
	Tips- 101-1000ul		VWR; 89217-468	\$90.33 for 8 racks	0.2 rack	\$2.26
				Total/sample		\$14.67
Reverse Transcription (with DNase	Kit- Quantitect		Qiagen; 205311	\$213.80 for 50	1 rxn	\$4.28

included)	Gloves	VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
	Tubes	VWR; 10011-780	\$31.32 for 1000	1 tube	\$0.03
	Tips- 0.1-10ul	VWR; 89140-160	\$37.75 for 10 racks	0.1 rack	\$0.38
	Tips- 1-200ul	VWR; 89140-936	\$37.75 for 10 racks	0.1 rack	\$0.38
				Total/sample	\$5.35
SYBR Green qPCR (not including primers) Unit is one plate	Master Mix	ABI; 4309155	\$442.00 for 800rxns	1 plate (96 wells)	\$54.03
	Plate	VWR; 47749-876	\$110 for 50 plates	1 plate (96 wells)	\$2.20
	Film	ABI; 4311971	\$257 for 100 files	1 plate (96 wells)	\$2.57
	18s rRNA reagents	ABI; 4310893E	\$610.00 for 4000 rxns	1 plate (48 wells)	\$7.32
	Nuclease free water	Fisher; NC9630308	\$184.87 for 4L	3ml per plate	\$0.14
	Tips- 0.1-10ul	VWR; 89140-160	\$37.75 for 10 racks	1.5 racks/plate	\$5.67
	Tips- 1-200ul	VWR; 89140-936	\$37.75 for 10 racks	0.5 racks/plate	\$1.89
	Tips- 101-1000ul	VWR; 89217-468	\$90.33 for 8 racks	0.1 racks/plate	\$1.13
	Gloves	VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
				Total/plate	\$75.23
Taqman qPCR (not including primer/probe sets) Unit is one plate	Master Mix	ABI; 4324018	\$453 for 800 rxns	1 plate (96 wells)	\$54.36
	Plate	VWR; 47749-876	\$110 for 50 plates	1 plate (96 wells)	\$2.20
	Film	ABI; 4311971	\$257 for 100 files	1 plate (96 wells)	\$2.57
	18s rRNA reagents	ABI; 4310893E	\$610.00 for 4000 rxns	1 plate (48 wells)	\$7.32
	Nuclease free water	Fisher; NC9630308	\$184.87 for 4L	3ml per plate	\$0.14
	Tips- 0.1-10ul	VWR; 89140-160	\$37.75 for 10 racks	1.5 racks/plate	\$5.67
	Tips- 1-200ul	VWR; 89140-936	\$37.75 for 10 racks	0.5 racks/plate	\$1.89
	Tips- 101-1000ul	VWR; 89217-468	\$90.33 for 8 racks	0.1 racks/plate	\$1.13
	Gloves	VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
				Total/plate	\$75.56
Traditional PCR (not including primers or DNA isolation) Unit is per sample	Master Mix	ABI; 4318739	\$297.00 for 5ml	1 rxn	\$1.49
	Tubes	VWR; 10011-780	\$31.32 for 1000	1 tube	\$0.03
	Agarose	VWR; IB7040	\$115.26 for 100g	1 gel (medium; 1.5%)	\$2.59
	Buffer	VWR; IB70155	\$52.75 for 1L of 20X	1L	\$2.63
	Ethidium Bromide	VWR; IB40075	\$30.68 for 10ml of 10mg/m	10ul	\$0.03
	Nuclease free water	Fisher; NC9630308	\$184.87 for 4L	1ml	\$0.05
	Gloves	VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
	Ladder	VWR; 101414-452	\$42.64 for 50 runs	1 lane	\$0.85
				Total per sample	\$7.95
Agilent Chips	Nano Chip	Agilent; 5067-1511	\$612.90 for 25 chips	1 sample	\$2.04
	Pico Chip	Agilent; 5067-1513	\$672.30 for 25 chips	1 sample	\$2.24
	Gloves	VWR; 40101-346	\$14.00 for 100 gloves	2 gloves	\$0.28
	Tips	VWR; 89140-160	\$37.75 for 10 racks	0.1 rack	\$0.38
				Total/Nano sample	\$2.70
				Total/Pico sample	\$2.90
				Total/Nano Chip	\$32.40
			Total/Pico Chip	\$34.80	
Quantitation on NanoDrop	Core Biology Facility		\$10.00/visit (unlimited samples)		
Labor charge (hourly; undergraduate student)			\$8.00/hr		
Cloning	will have to be determined on a case by case basis as vectors, primers, enzymes, plasmid preps and sequencing costs will vary				

Histology Fee Structure

Experimental Description	Reagents needed	Reagent Description	Vendor and #	Cost and unit	Amount needed/unit	Cost/unit processed
Pre-processing- Carnoys Unit is 1 jar	Carnoys Fixative (\$17.85/L)	Carnoy's Solution	Fisher; R18510004C	\$71.40 for 4L	120ml Carnoys/jar	\$2.15
	70% Ethanol	Ethanol	Chem Stores	\$14.83/gallon	480ml/jar Total/jar	\$1.42 \$3.57
Pre-processing- NBF Unit is 1 jar	10% Buffered Formalin		Fisher; SF100-4	\$29.90 for 4L	120ml NBF/jar	\$0.90
	70% Ethanol	Ethanol	Chem Stores	\$14.83/gallon	120ml /jar Total/jar	\$0.36 \$1.26
Putting Tissues into Cassettes	Mega Cassettes		VWR; 25608-844	\$166.44/750	1 cassette	\$0.22 each
	Blue Biopsy Cassettes		VWR; 25608-754	\$110.00/500	1 cassette	\$0.22 each
	Uni-Cassettes (any color)		VWR; various	\$102.01/500	1 cassette	\$0.21 each
	Thomas Scientific Blades		Fisher; 6727C18	\$101.12/25	1 blade	\$4.04 each
	Single Edge extra long blades		VWR; 100500-638	\$58.44/250	1 blade	\$0.23 each
	Sponges		VWR; 95039-818	\$189.35/1000	1 sponge	\$0.19 each
	Regular razor blades		VWR; 55411-050	\$16.29/100	1 blade	\$0.16 each
	70% Ethanol	Ethanol	Chem Stores	\$14.83/gallon	1L/big jar	\$2.90 each
Processor cost			Per cassette charge			
70% every 1800 cassettes	3684ml 95% EtOH	\$14.37		\$0.01	Carbon Filter	\$264.90
95% every 1800 cassettes	5000ml 95% EtOH	\$19.50		\$0.01	Every 6 months	
100% every 1800 cassettes	5000ml 100% EtOH	\$26.00		\$0.01		
Histoclear every 1800 cassettes	5000ml Histoclear	\$140.00		\$0.08		
2, 95% every 3600 cassettes	10L 95% EtOH	\$39.00		\$0.01		
2, 100% every 3600 cassettes	10L 100% EtOH	\$52.00		\$0.01		
2, Histoclear every 3600 cassettes	10L Histoclear	\$280.00		\$0.08		
1 cleaning Xylene every 1800	5000ml Xylene	\$34.90		\$0.02		
1 cleaning 100% EtOH every 1800	5000ml 100% EtOH	\$26.00		\$0.01		
1 wax bath every 1800 cassettes	4 bags of wax	\$46.28		\$0.03		
2 wax baths every 3600 cassettes	8 bags of wax	\$92.56		\$0.03		
		Total		\$0.30		
Embedding cost	2 bags of wax/300 cassettes			\$0.08		
		Total to process/embed		\$0.38		
	Required additional reagent and filter costs			\$1.36		
				\$1.74		
Cutting	High profile blades		VWR; 25608-961	\$102.53/50 blades	\$2.05/blade	
	Low profile blades		VWR; 25608-964	\$103.35/50 blades	\$2.07/blade	
	Slides		Fisher; 22-230-900	\$705.20/1440 slides	\$0.49/slide	
Slides			Fisher; 22-230-900	\$705.20 for 10 boxes	\$70.52/box	
Coverslips			VWR; 48404-466	\$71.31 for 10 boxes	\$7.13/box	
Labor charge (hourly; undergraduate student)				\$8.00/hr		
Staining- will have to be considered on a case-by-case basis						
Reagents (dyes, washes, Abs, developers, etc.)						

Items to build into a Lab Common Reagent/Consumable/Maintenance Fee

<u>Item</u>	<u>Estimated Occurrence</u>	<u>Total</u>	<u>Monthly Breakdown</u>
Microtome Calibration	yearly	\$200.00	\$16.67
qPCR dye Calibration	yearly	\$1,200.00	\$100.00
Tissue Culture Hood Certifications	every other year	\$495.00	\$20.63
Pipette calibrations	yearly	\$700.00	\$58.33
Biohazard and broken glass containers	twice a year	\$80.00	\$13.33
Miscellaneous lab supplies*		\$1,200.00	\$100.00
Amount to bring in/month			\$308.96

If \$308.96 is charged monthly to each of the 4 main investigators that would= \$77.24

If we have 5 users per month then it would= \$61.79

If we have 6 users per month then it would= \$51.49

*includes, among other supplies:

bench paper
kim wipes
nail polish for cover slipping
soaps and cleaning reagents
paper toweling (white- absorbent)
cutting board for cassetting station
germicideal wipes
squirt bottles
sharpies
gas tank rentals
lab tape
pap pens for histology lab
ink for printers
many other small miscellaneous items used daily
windex