

No. 6-Stores/NCDC/Req. CWG-2010
GOVERNMENT OF INDIA
NATIONAL CENTRE FOR DISEASE CONTROL
(DIRECTORATE GENERAL OF HEALTH SERVICES)
22-SHAM NATH MARG, DELHI-110054

Dated: 20-07-10

To

Dear Sir/Madam,

Please let this office know if you can supply the items (**List attached**), if so, please send your quotations giving in full specification, name of the manufacturer and other terms & conditions of delivery etc. **If firm is not the manufacturer then the firm quoting the product must submit authorization from the manufacturer.** The quotation which could remain valid for at least 6 months may be sent in double cover duly wax sealed and prominently subscribed '**Quotation for Chemicals/Reagents/Primers etc.**' **No. 6-Stores/ NCDC/Req. CWG-2010.**

The quotation should be addressed to the Chairperson, Purchase Committee, NCDC, 22-Sham Nath Marg, Delhi-110054 and should reach this office on or before 20-08-10 till 4 p.m.

The quotations which are not received duly sealed, mentioning this office letter number and last date of receiving will not be accepted. **Sales Tax Registration Certificate** must be enclosed with the quotation. The firm has to ensure that sealed quotations have been put in Tender Box kept in Store Section after making proper entry in register. Firm to note that it is mandatory to mention the make of each item alongwith the authorization from the principal failing which the tender may be rejected.

Yours faithfully,

(PANKAJ KUMAR)
STORES OFFICER
FOR DIRECTOR

Serial Number	Name of equipment	Quantity required (approx.)	Specifications
1	Floating rack, micro centrifuge tube, circular	20	Made use in Beaker. will hold 1.5 ml tube, there is central rod and handle, fit inside 1000 ml beaker
2	Gel cutter	10	Acrylic, 20cm long. use in to cut agarose and polyacrylamide gel
3	Staining box	10	For staining and destining of electrophoresis gel, resist to acid, base, some organic solvents, plugs allows. draining ,22.5 L x 22.5W x 5 cm H
4	Gel Scoop	10	Acrylic made, to transfer of polyacrylamide/ agarose gel between electrophoresis unit stain/destain tray and transilluminator
5	Slide staining racks for 30 pcs	10	25.4 mm x 76.2mm ,made of stainless steel
6	Inoculating loops	20	Nichrome wire with aluminum handle (3mm Diameter)
7	Spatula-200 mm 20 pcs	30	Stainless steel using for weighing dry powder
8	Spatula-128 mm 20 pcs	30	Stainless steel using for weighing dry powder
9	Marker pen narrow tip(Permanent glass marking) - 10quantity req required	20	Permanent glass marking/ cutting pen with tungsten carbide tip
10	Hot plate/stirrer	3	Variable heating range from ambient to 400 degree Celsius, temperature control +/- 1 degree Celsius ,stirring speed 25-1500 rpm, porcelain coated stainless steel, top epoxy painted aluminium, chemically resistance, 10 inch x 10 inch, 230 V Ac
11	Para film	10	Roll size 4 inch x 250 inch, DNase, RNases free
12	Stirring – bars, Magnetic -- octagonal shape	30	Teflon coated,leak proof,seamless and contain permanent Alnico v magnets, 2inch length x 0.3125 Breadth inch
13	Stirring – bars, Magnetic –(+) cross shape	10	Teflon coated,leak proof,seamless and contain permanent Alnico v magnets, 1 inch length x 1 Breadth inch
14	Micropipette	10	Acrylic racks,hold variety pipet,upper racks

	holder		225 mm wide slots, lower 20 mm wide slots
15	Pipette pumps—up to 25 ml	10	Swheel provide precise control of filling and dispensing, rapid emptying is possible
16	Syringes-capacity 5 microlitre	60	Borosilicate glass barrel, stainless plunger, cemented needle ,needle 26 gauge, one pieces strengthen plunger, and full length glass barrel
17	Tough tags	3000 pcs	Resist to deep freeze, water proof, suitable for 0.5 ml per tube and 1.5 ml micro centrifuge tube
18	Stirring bar retrievers 13 inch	20	Retrivers contains an alnico v magnet seal in one end
19	Microslides	40000	
20	Micro vials 0.2ml	30000	
21	Disposable vial with spatula & labels (10 ml)	15000	
22	Spirit swab disposable	35000	
23	Storage Vial 10	4000	
24	Disposable Loops	2000	
25.	Collection containers autoclavable plastic with Lid 1 L	300 pcs.	
26.	Collection containers-Steel bucket 2 L	30	
27.	Conical flask 1 ltr.	30	
28.	Glass Beaker		
	1 ltr.	30	
	2 ltr.	10	
29.	Autoclavable Funnel (diameter-10 inches approx.)	20 pcs.	

Enzymes

S.no	Restriction Enzyme	Specification	Quantity required
1	EcoR 1	5-G/AATTC—3 From E.coli RY13 solution in buffer solution Supplied at minus 20 ⁰ C with concentration assay conditions etc .	10 000 Units
2	HIND III	5---A/AGCTT—3 Supply at minus 20 ⁰ C with buffer , mentioning concentration , assay condition etc .	10 000 Units
3	Hae III	5 –GG/CC –3 Supply in Storage buffer mentioning concentration , assay conditions etc. Supply at minus 20 ⁰ C.	3 000 Units

B: Molecular biology reagents - DNA MARKER

Dna marker size	Quantity	DNA fragments Range :bp	No of Fragments
100-1500	20 micrograms	100-1500	15
700-30 000	10 micrograms	700-30 000	33
Lambda DNA / Hind-3 marker	150 micrograms	125- 23 130	8
50 – 1000 bp for PCR	50 micrograms	50-1 000	13

Additional specifications:

Shelf life at room temperature or at +4°C for periods up to 6 months and minimum. Minimum 2 yrs at – 20 deg centigrade. To be Supply with storage buffer and loading dye in ready to use format, in aliquots form. Specify details of concentration and assay conditions. Absence of nuclease or Rnase activity.

C . Molecular Biology reagents – Taq Polymerizes

Taq DNA Polymerase – 100 units
(concentration 5 micron per micro litre)

Supplied with BSA (concentration 0.1 mg per ml) and activity assay, storage buffer ,
10x taq buffer with KCL , 10 X taq buffer with (NH₄)₂SO₄
Endodeoxyribonuclease, Exodeoxyribonuclease, Ribonuclease activity free.
Half-life: More than 40 minutes at 95 degree Celsius.
Should accept modified nucleotides (Biotin , Digoxigenin or fluorescent labels)

Ribonuclease A (Rnase A)- 10 mg

Concentration: 10mg/ml

Supply with following condition: Expiry Date given, Storage Buffer. In 1 ml vials.
Supply at -20°C.

Molecular Weight 13.7kDa monomer. Specific activity ≥ 5000 u/mg protein (≥ 100
Kunitz units/mg protein). The working concentration should be specified.

The enzyme should be active under a wide range of reaction conditions. Should be
free from any Endodeoxyribonuclease, Exodeoxyribonuclease, or Protease activity.
Functional Assay report should be enclosed.

Deoxyribonuclease I (DNase I)- 500 Units

Concentration: 1u/ μ l

To be Supplied with -10X Reaction Buffer, Storage Buffer. Supplied at minus at
minus 20°C. Shelf life min 2 Yrs on receipt . .Ribonuclease free

Water, nuclease-free – 100 ml

molecular biology grade

Lot:10 x 10 ml

Store at -20°C, Water, nuclease-free, is 0.22 μ m membrane-filtered, molecular biology
grade water. *Nicking Activity free ,Labeled Oligonucleotide (LO free) Ribonuclease*
Activity free

Proteinase K – 1 ml

Concentration: 900 u/ml (18.9 mg/ml)

Supply with Storage Buffer ,Expiry Date given

Source-*Pichia pastoris* cells with a cloned gene encoding *Tritirachium album*
endolytic protease (Proteinase K). 28.9 kDa monomer

Optimum activity at 50-55°C., denaturation above 65°C. working concentration for
Proteinase K is 0.05-1 mg/ml, The activity of the enzyme is stimulated by 0.2-1%
SDS or by 1-4 M urea ,Ca²⁺ protects Proteinase K against autolysins, increases the
thermal stability and has a regulatory function for the substrate binding site of
Proteinase K, Stable over a wide pH range

Endodeoxyribonuclease free Exodeoxyribonuclease free, Ribonuclease free

dNTP Set - 4x100 μ mol

Supplied with 1ml of 100mM dATP, 1ml of 100mM dCTP, 1ml of 100mM dGTP

1ml of 100mM dTTP.

All contain in separate vial.dNTP give maximum flexibility in preparation of reaction mixtures.,Store at -20°C,pH-7,HPLC purified, UV detected max at 260 – 280 nm,Purity more than >99.2 %, of exo-,endo-deoxyribonuclease and phosphatase contaminants Ribonuclease not detectable, PCR with *Pfu* and *Taq* DNA Polymerases (1000 bp PCR fragment from 2ng of genomic DNAPassed)

D . Molecular biology grade chemicals (More than 99 % purity)

S.no	Name with specifications	Quantity
1	Agarose EEO < 0.15, DNA'se and RNA's free, for DNA electrophoresis work	200gm
2	Ammonium Acetate mol biology grade > 99 % pure	100 gm
3	Ammonium Chloride mol biology grade > 99 % pure	100 gm
4	Ammonium Persulphate –polymerization catalyst used with TEMED for polyacraylmide gel	100gm
5	Boric acid mol boil grade (> 99 % pure)	500 gm
6	Calcium Chloride dehydrated- mol boil grade(>99 % pure)	500 gm
7	Chloroform –containing Amylenes as stabilizer. Purity more than 99 %,	500 ml
8	Isoamyl Alcohol mol boil grade	1000 ml
9	Dimethyl Sulphooxide- mol grade grade(> 99 % pure)	50 ml
10	EDTA Disodium Dihydrate salt- mol biology grade (> 99 % pure)	100 gm
11	Glycerol. Molecular biology grade. RNases, DNase, protease free. Heavy metal less than 5ppm	500 ml
12	D-Glucose (> 99 % pure)	100 gm
13	Ethanol more than 100% pure. Mol boil grade	500 ml

14	Guanidium Thiocynate- Molecular biology grade, purity more than 99 %	250 gm
15	Magnesium chloride -Molecular biology grade, purity more than 99 %	100 gm
16	Potassium chloride Molecular biology grade, purity more than 99 %	100 gm
17	Potassium Acetate-- Molecular biology grade, purity more than 99 %,	100 gm
18	Iso-prapanol- Molecular biology grade, purity more than 99 %	500 ml + 2
19	Phenol crystal – Molecular biology grade, purity more than 99 %, heavy metal less than 0.01%	100 gm
20	Sodium chloride, Mol boil grade.	100 gm
21	Sodium acetate Anhydrous--Molecular Biology Grade purity more than 99 %	100 gm
22	Sodium bicarbonate-- Molecular biology grade, purity more than 99 %	100 gm
23	Sodium Phosphate mono basic anhydrous- Molecular biology grade, purity more than 99 %,	100 gm
24	Sodium phosphate dibasic- Molecular biology grade, purity more than 99 %	100 gm
25	Sucrose -Molecular Biology grade, purity more than 99 %, heavy metal less than 5ppm,Rnase, Dnase, Protease free	100 gm
26	Sodium hydroxide crystal- Molecular biology grade, purity more than 99 %	100 gm
27	Sodium Dodecyl sulphate-- Molecular biology grade, purity more than 99 %,	100 gm
28	Tween 20 viscous liquid-- Molecular biology grade, purity 50 percent lauric acid	50ml
29	Tween 80 syrup Molecular biology grade, purity more than 99 %	100ml
30	Tris Base. Mol boil grade.	100 gm

31	Tris – chloride . Molecular biology grade, purity more than 99 %	250gm
32	TRIS --Molecular biology grade, purity more than 99 %,buffer pH range 7-9,Pka at 25 degree Celsius=8.1	500gm
33	Triton X-100-- Molecular biology grade, purity more than 99 %, heavy metal less than 2ppm	100ml
34	Acrylamide- Molecular biology grade, purity more than 99 %, Dnases, Rnases, proteases free, Acrylic Acid content <0.001%	100gm
35	N,N-Methylene-Bis- Acrylamide-- Molecular biology grade, purity more than 98 %,acrylic content < 0.1%,	25gm
36	2-mercat ethanol-- Molecular biology grade, purity more than 99 %,	1 00 gm
37	Urea- Molecular biology grade, purity more than 99 %, heavy metal less than 2ppm	500gm
38	Methanol -Molecular biology grade, purity more than 99 %	500ml
39	TEMED- Molecular biology grade, purity more than 99 %, for polyacraylmide gel	1gm
40	Dithiothreitol- Molecular biology grade, purity more than 99 %	100ml
41	Bromophenol Blue Dye	5 gm
42	Form amide-- Molecular biology grade, purity more than 99 %	250gm
43	Acetic Acid- Molecular biology grade, purity more than 99 %	100ml
44	Isopropyl alcohol-- Molecular biology grade, purity more than 99 %	100 ml
45	Glycerol -Molecular biology grade, purity more than 99 %, used in electrophoresis buffer	500 ml

Requirement of primers for rapid molecular diagnosis of bacterial enteropathogen during commonwealth game 2010.

Primer Quantity

11 Sets of Primer (forward and reverse). 4 OD minimum. Sequence attached.

Primer Specification:

- 1) Oligos should be **HPLC purified. Desalted** and in lyophilized form.
- 2) 50 nm scale, **4 OD** minimum.
- 3) 17-25 base pair long.
- 4) **Not more than single mismatch especially at 5 prime and 3 prime ends.**QC checked.
- 5) Data sheet should mention Yield OD/ volume (micro liter)/ concentration
(micro molar)/ Molecular weight/GC Content/ Volume of Buffer
(micro liter) added to make 100 micro molar stock solution.
- 6) Supply in cold chain with T.E buffer.

Justification:

Rapid Molecular diagnosis of enteropathogen like *E.coli*, *Vibrio cholerae*, *Shigella*.

Sequence information : Next Page

Target gene product Amplification (bp)	Primer sequences (5'- 3')	Amplification
<i>ctx A</i> 302	CTC AGA CGG GAT TTG TTA GGC ACG TCT ATC TCT GTA GCC CCT ATT ACG	
<i>tcpA</i> , El Tor 472	GAA GAA GTT TGT AAA AGA AGA ACAC GAA AGG ACC TTC TTT CAC GTT G	
<i>elt</i> 708	GCG ACA AAT TAT ACC GTG CT CCG AAT TCT GTT ATA TAT ATG T	
<i>est</i> 190	ATT TTT A/CTT TCT GTA TTA/G TCT T CAC CCG GTA CAA/G GCA GGA TT	
<i>eae</i> 454	AAA CAG GTG AAA CTG TTG CC CTC TGC AGA TTA ACC CTC TGC	
<i>bfpA</i> 324	AAT GGT GCT TGC GCT TGC TGC	

GCC GCT TTA TCC AAC CTG GTA

EAF
397
CAG GGT AAA AGA AGA TGA TAA
TAT GGG GAC CAT GTA TTA TCA

stx 1
350
CAA CAC TGG ATG ATC TCA G
CCC CCT CAA CTG CTA ATA

stx 2
110
ATC AGT CGT CAC TCA CTG GT
CTG CTG TCA CAG TGA CAA A

EAgg
630
CTG GCG AAA GAC TGT ATC AT
CAA TGT ATA GAA ATC CGC TGT T

east
94
CAC AGT ATA TCC GAA GGC
CGA GTG ACG GCT TTG TAG