



**Agricultural Research Council
Onderstepoort Veterinary Institute (OVR)**

Request for Quotation

RFQ NUMBER:	RFQ-LIA,HELENA
CLOSING DATE:	Date: 14 February 2023 Time : 13H00
DESCRIPTION	CONSUMABLES
ADDRESS	ARC-Onderstepoort Veterinary Institute (ARC-OVI) 100 Old Soutpan Road (M35) Private Bag X05 ONDERSTEPOORT 0110
ENQUIRY	Name: Ms Mosidi Ramosunya SCM Email: RamosunyaM@arc.agric.za
COMPULSORY SITE BRIEFING	No

Research Consumables

1. You are kindly requested to submit a written quotation to the Agricultural Research Council as per below or attached terms of reference (TOR).

	RFQ number	Description	Quantity	Unit of Measure
1	REQ-059632	10 ul Filter tips 10 x 96/PK DNAase/RNAase free Filtered tips that are able to fit on Finn pipettes and gilson pipettes without any leakage X30 200ul Filter tips 10 x 96/PK DNAase/RNAase free Filtered tips that are able to fit on Finn pipettes and gilson pipettes without any leakage X15 1000ul Filter tips 10 x 96/PK DNAase/RNAase free Filtered tips that are able to fit on Finn pipettes and gilson pipettes without any leakage X20		each

	RFQ number	Description	Quantity	Unit of Measure
2	REQ-059629	10 ul Filter tips 10 x 96/PK DNAase/RNAase free Filtered tips that are able to fit on Finn pipettes and gilson pipettes without any leakage X30 200ul Filter tips 10 x 96/PK DNAase/RNAase free Filtered tips that are able to fit on Finn pipettes and gilson pipettes without any leakage X5 1000ul Filter tips 10 x 96/PK DNAase/RNAase free Filtered tips that are able to fit on Finn pipettes and gilson pipettes without any leakage X5		EACH
3	REQ-054170	- LB, Quick-Preparation Agar Media (with Amp) Pre-mixed, pre-sterilized E. coli growth agar medium that can be prepared in just five minutes without autoclaving, containing everything you need to prepare low-salt LB agar plates, with ampicillin - LB, Quick-Preparation Liquid Media (with Amp) Pre-mixed, pre-sterilized E. coli growth liquid medium that can be prepared in just five minutes without autoclaving, containing everything you need to prepare low-salt LB liquid medium with ampicillin - LB, Quick-Preparation Agar Blue screening Media (with Amp) Pre-mixed, pre-sterilized E. coli growth agar medium with X-gal/IPTG for blue/white colony screening that can be prepared in just five minutes without autoclaving, containing everything you need to prepare blue/white screening agar plates with ampicillin	5	EACH
	REQ-057461	10ml sterile pipettes 200/pkt, individually paper/plastic wrapped	10	EACH
	REQ-055121	- K2 EDTA Vacutainer bleeding tubes (sterile) 10 x 100/box, 8 ml, - Yellow Vacutainer bleeding tubes with gel (sterile) 10 x 100/box, 8 ml, - Heparine Vacutainer bleeding tubes BD LH170 I.U. 10 x 100/box, 10ml, - Terumo Needles 26G 10 x 100/box, 26G x ½ (0.45x13mm),	10	BOX

	RFQ number	Description	Quantity	Unit of Measure
		- Terumo Needles 18G 10 x 100/box, 18G x 1½ (1.20x38mm), - Terumo Needles 21G 10 x 100/box, 21G x 1½ (0.80x38mm), - SGVAC Blood collection needle 18G 10 x 100/box, 18G x 1½, (38mm)		
	REQ-054175	Cell Scraper, 1000/pkt 25cm handle, 20mm scraper blade, sterile	1	Each
	REQ-054166	Luerlock 1ml syringe without needles, 10 X 100/box	10	EACH
	REQ-055970	Cupric Sulphate granular crystals 1kg, CuSO₄,	1	kg
	REQ-054148	- Surgical Blade #40 (6mm) Surgical Blade, Item no: WSA2352-100, QN: 20201435 x2 - Grind- (small) Blade sets x7 Grind A/WAHL, QN: 20201435 - Freight/Courier Fuel x1		each
	REQ-058275	Primers & Probes with modifications PLEASE SEE LIST ATACHED AT THE END OF THE RFQ		

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2. Essential administrative requirements:

- 2.1. Only bidders registered on the Central Supplier Database (CSD) will be considered. Bidders shall include the CSD registration number and full CSD report with the bid proposal.
 - 2.2. Only bidders that claim specific goals will be considered for scoring on the 20 points as per the 80/20 principle.
 - 2.3. Completed and signed Standard Bidding Documents (SBD) forms included in the bid document.
3. The above specified goods/services should be delivered / rendered to the ARC-Onderstepoort Veterinary Institute at above-mentioned delivery address.
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4. The particulars of the guarantee that will apply to the goods quoted for, with the particular regards to the period and extent of the warranty must be clearly stated. Where services are required, service providers must submit documentation pertaining the relevant experience.
 5. Your written quotation must be emailed depending on the instructions given in the email or advert.
 6. All price quotations that have a rand value of R 2,000.00 to below R 50,000,000.00, including VAT, will be evaluated by applying the 80/20 principle as prescribed by the Preferential Procurement Policy Framework Act 5 of 2022 and its Regulations.

7. The lowest acceptable price will score 80 points, Specific goals for the tender and points claimed are indicate per the table below:

The specific goals allocated points in terms of this tender	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Percentage (%) Ownership by HDIs	Points 8	
91-100%	8	
81-90	7	
71-80	6	
61-70	5	
51-60	4	
41-50	3	
21-40	2	
1-20	1	
0%	0	
Percentage (%) ownership by Women	Points (4)	
81-100	4	
51-80	3	
31-50	2	
1-30	1	
0%	0	
Percentage (%) Ownership (by Youth	Points (4)	
81-100	4	
51-80	3	
31-50	2	
1-30	1	
0%	0	
Percentage Ownership by PwD	Points (2)	

51-100%	2	
1-50	1	
0%	0	
RDP Goals	Points (2)	
EME's/QSE's	2	

8. Standard conditions:

8.1 The validity of the quotations must be indicated.

8.2 Prices quoted should be in South African Rand and inclusive of VAT costs such as delivery, insurance, taxes, etc.

8.3 No price adjustments or amendment of the delivery particulars contained in paragraph 8.2 will be considered by the ARC.

8.4 The supplier accepts full responsibility for the proper execution and fulfilment of the goods/services quoted for.

8.5 ARC reserves the right to accept or reject any special terms and conditions that may qualify the goods/services to be provided.

8.6 Quotes should be submitted on an official letterhead and duly signed.

8.7 Goods and services should be supplied / rendered upon receipt of a purchase order from the ARC.

8.8 The General Conditions of Contract issued by National Treasury are applicable.

8.9 The ARC supply chain management code of conduct is applicable.

8.10 Standard Bidding Documents (SBD) forms must be signed and returned together with the quotation. Failure to comply may result to disqualification of your quotation.

8.11 Only the quotation from suppliers who are requested to quote shall be evaluated and considered.

8.12 Your quotation must indicate the delivery date.

8.13 The ARC reserve the right to do due diligence on the quotations.

8.14 The ARC reserves the right to benchmark prices quoted.

Thank you in anticipation.

Ms Mosidi Ramosunya

Tel: +27 (0) 12 529-9315

Email: RamosunyaM@arc.agric.za

Supply Chain Management: ARC

Date: 2023-02-07

SBD 6.1

**PREFERENCE POINTS CLAIM FORM IN TERMS OF THE PREFERENTIAL
PROCUREMENT REGULATIONS 2022**

This preference form must form part of all tenders invited. It contains general information and serves as a claim form for preference points for specific goals.

**NB: BEFORE COMPLETING THIS FORM, TENDERERS MUST STUDY THE
GENERAL CONDITIONS, DEFINITIONS AND DIRECTIVES APPLICABLE IN
RESPECT OF THE TENDER AND PREFERENTIAL PROCUREMENT
REGULATIONS, 2022**

1. GENERAL CONDITIONS

1.1 The following preference point systems are applicable to invitations to tender:

- the 80/20 system for requirements with a Rand value of up to R50 000 000 (all applicable taxes included); and
- the 90/10 system for requirements with a Rand value above R50 000 000 (all applicable taxes included).

1.2 **To be completed by the organ of state**

(delete whichever is not applicable for this tender).

- a) The applicable preference point system for this tender is the 90/10 preference point system.
- b) The applicable preference point system for this tender is the 80/20 preference point system.
- c) Either the 90/10 or 80/20 preference point system will be applicable in this tender. The lowest/ highest acceptable tender will be used to determine the accurate system once tenders are received.

1.3 Points for this tender (even in the case of a tender for income-generating contracts) shall be awarded for:

- (a) Price; and
- (b) Specific Goals.

1.4 **To be completed by the organ of state:**

The maximum points for this tender are allocated as follows:

	POINTS
PRICE	80
SPECIFIC GOALS	20
Total points for Price and SPECIFIC GOALS	100

1.5 Failure on the part of a tenderer to submit proof or documentation required in terms of this tender to claim points for specific goals with the tender, will be interpreted to mean that preference points for specific goals are not claimed.

1.6 The organ of state reserves the right to require of a tenderer, either before a tender is adjudicated or at any time subsequently, to substantiate any claim in regard to preferences, in any manner required by the organ of state.

2. DEFINITIONS

- (a) **“tender”** means a written offer in the form determined by an organ of state in response to an invitation to provide goods or services through price quotations, competitive tendering process or any other method envisaged in legislation;

- (b) **“price”** means an amount of money tendered for goods or services, and includes all applicable taxes less all unconditional discounts;
- (c) **“rand value”** means the total estimated value of a contract in Rand, calculated at the time of bid invitation, and includes all applicable taxes;
- (d) **“tender for income-generating contracts”** means a written offer in the form determined by an organ of state in response to an invitation for the origination of income-generating contracts through any method envisaged in legislation that will result in a legal agreement between the organ of state and a third party that produces revenue for the organ of state, and includes, but is not limited to, leasing and disposal of assets and concession contracts, excluding direct sales and disposal of assets through public auctions; and
- (e) **“the Act”** means the Preferential Procurement Policy Framework Act, 2000 (Act No. 5 of 2000).

3. FORMULAE FOR PROCUREMENT OF GOODS AND SERVICES

3.1. POINTS AWARDED FOR PRICE

3.1.1 THE 80/20 OR 90/10 PREFERENCE POINT SYSTEMS

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \\ \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} - \frac{\mathbf{Pt} - \mathbf{Pmin}}{\mathbf{Pmin}} \right) \end{array}$$

Where

- Ps = Points scored for price of tender under consideration
- Pt = Price of tender under consideration
- Pmin = Price of lowest acceptable tender

3.2. FORMULAE FOR DISPOSAL OR LEASING OF STATE ASSETS AND INCOME GENERATING PROCUREMENT

3.2.1. POINTS AWARDED FOR PRICE

A maximum of 80 or 90 points is allocated for price on the following basis:

$$\begin{array}{ccc} \mathbf{80/20} & \mathbf{or} & \mathbf{90/10} \\ \\ \mathbf{Ps} = \mathbf{80} \left(\mathbf{1} + \frac{\mathbf{Pt} - \mathbf{Pmax}}{\mathbf{Pmax}} \right) & \mathbf{or} & \mathbf{Ps} = \mathbf{90} \left(\mathbf{1} + \frac{\mathbf{Pt} - \mathbf{Pmax}}{\mathbf{Pmax}} \right) \end{array}$$

Where

- Ps = Points scored for price of tender under consideration
Pt = Price of tender under consideration
Pmax = Price of highest acceptable tender

4. POINTS AWARDED FOR SPECIFIC GOALS

- 4.1. In terms of Regulation 4(2); 5(2); 6(2) and 7(2) of the Preferential Procurement Regulations, preference points must be awarded for specific goals stated in the tender. For the purposes of this tender the tenderer will be allocated points based on the goals stated in table 1 below as may be supported by proof/ documentation stated in the conditions of this tender:
- 4.2. In cases where organs of state intend to use Regulation 3(2) of the Regulations, which states that, if it is unclear whether the 80/20 or 90/10 preference point system applies, an organ of state must, in the tender documents, stipulate in the case of—
- (a) an invitation for tender for income-generating contracts, that either the 80/20 or 90/10 preference point system will apply and that the highest acceptable tender will be used to determine the applicable preference point system; or
 - (b) any other invitation for tender, that either the 80/20 or 90/10 preference point system will apply and that the lowest acceptable tender will be used to determine the applicable preference point system,
- then the organ of state must indicate the points allocated for specific goals for both the 90/10 and 80/20 preference point system.

Table 1: Specific goals for the tender and points claimed are indicated per the table below.

(Note to organs of state: Where either the 90/10 or 80/20 preference point system is applicable, corresponding points must also be indicated as such.

Note to tenderers: The tenderer must indicate how they claim points for each preference point system.)

The specific goals allocated points in terms of this tender	Number of points allocated (90/10 system) (To be completed by the organ of state)	Number of points allocated (80/20 system) (To be completed by the organ of state)	Number of points claimed (90/10 system) (To be completed by the tenderer)	Number of points claimed (80/20 system) (To be completed by the tenderer)
Percentage (%) Ownership by HDIs		Points 8		
91-100%		8		
81-90		7		
71-80		6		
61-70		5		
51-60		4		
41-50		3		
21-40		2		
1-20		1		
0%		0		
Percentage (%) ownership by Women		Points (4)		
81-100		4		
51-80		3		
31-50		2		
1-30		1		
0%		0		
Percentage (%) Ownership (by Youth		Points (4)		
81-100		4		
51-80		3		
31-50		2		
1-30		1		
0%		0		
Percentage Ownership by PwD		Points (2)		
51-100%		2		

1-50		1		
0%		0		
RDP Goals		Points (2)		
Any RDP goal/s		2		

DECLARATION WITH REGARD TO COMPANY/FIRM

4.3. Name of company/firm.....

4.4. Company registration number:

4.5. TYPE OF COMPANY/ FIRM

Partnership/Joint Venture / Consortium

One-person business/sole propriety

Close corporation

Public Company

Personal Liability Company

(Pty) Limited

Non-Profit Company

State Owned Company

[TICK APPLICABLE BOX]

4.6. I, the undersigned, who is duly authorised to do so on behalf of the company/firm, certify that the points claimed, based on the specific goals as advised in the tender, qualifies the company/ firm for the preference(s) shown and I acknowledge that:

- i) The information furnished is true and correct;
- ii) The preference points claimed are in accordance with the General Conditions as indicated in paragraph 1 of this form;
- iii) In the event of a contract being awarded as a result of points claimed as shown in paragraphs 1.4 and 4.2, the contractor may be required to furnish documentary proof to the satisfaction of the organ of state that the claims are correct;
- iv) If the specific goals have been claimed or obtained on a fraudulent basis or any of the conditions of contract have not been fulfilled, the organ of state may, in addition to any other remedy it may have –

(a) disqualify the person from the tendering process;

(b) recover costs, losses or damages it has incurred or suffered as a result of that person's conduct;

(c) cancel the contract and claim any damages which it has suffered as a result of having to make less favourable arrangements due to such cancellation;

(d) recommend that the tenderer or contractor, its shareholders and directors, or only the shareholders and directors who acted on a fraudulent basis, be restricted from obtaining business from any organ of state for a period not exceeding 10 years, after the *audi alteram partem* (hear the other side) rule has been applied; and

(e) forward the matter for criminal prosecution, if deemed necessary.

.....

SIGNATURE(S) OF TENDERER(S)

SURNAME AND NAME:

DATE:

ADDRESS:

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.....

.....

SBD4

BIDDER'S DISCLOSURE

1. PURPOSE OF THE FORM

Any person (natural or juristic) may make an offer or offers in terms of this invitation to bid. In line with the principles of transparency, accountability, impartiality, and ethics as enshrined in the Constitution of the Republic of South Africa and further expressed in various pieces of legislation, it is required for the bidder to make this declaration in respect of the details required hereunder.

Where a person/s are listed in the Register for Tender Defaulters and / or the List of Restricted Suppliers, that person will automatically be disqualified from the bid process.

2. Bidder's declaration

- 2.1 Is the bidder, or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest¹ in the enterprise,

employed by the state?

YES/NO

- 2.1.1 If so, furnish particulars of the names, individual identity numbers, and, if applicable, state employee numbers of sole proprietor/ directors / trustees / shareholders / members/ partners or any person having a controlling interest in the enterprise, in table below.

Full Name	Identity Number	Name of State institution

- 2.2 Do you, or any person connected with the bidder, have a relationship with any person who is employed by the procuring institution? **YES/NO**

- 2.2.1 If so, furnish particulars:

.....
.....

¹ the power, by one person or a group of persons holding the majority of the equity of an enterprise, alternatively, the person/s having the deciding vote or power to influence or to direct the course and decisions of the enterprise.

- 2.3 Does the bidder or any of its directors / trustees / shareholders / members / partners or any person having a controlling interest in the enterprise have any interest in any other related enterprise whether or not they are bidding for this contract?

YES/NO

- 2.3.1 If so, furnish particulars:

.....
.....

3 DECLARATION

I, _____ the _____ undersigned,
(name)..... in submitting the
accompanying bid, do hereby make the following statements that I certify to be true
and complete in every respect:

- 3.1 I have read and I understand the contents of this disclosure;
- 3.2 I understand that the accompanying bid will be disqualified if this disclosure is found not to be true and complete in every respect;
- 3.3 The bidder has arrived at the accompanying bid independently from, and without consultation, communication, agreement or arrangement with any competitor. However, communication between partners in a joint venture or consortium² will not be construed as collusive bidding.
- 3.4 In addition, there have been no consultations, communications, agreements or arrangements with any competitor regarding the quality, quantity, specifications, prices, including methods, factors or formulas used to calculate prices, market allocation, the intention or decision to submit or not to submit the bid, bidding with the intention not to win the bid and conditions or delivery particulars of the products or services to which this bid invitation relates.
- 3.4 The terms of the accompanying bid have not been, and will not be, disclosed by the bidder, directly or indirectly, to any competitor, prior to the date and time of the official bid opening or of the awarding of the contract.
- 3.5 There have been no consultations, communications, agreements or arrangements made by the bidder with any official of the procuring institution in relation to this procurement process prior to and during the bidding process except to provide clarification on the bid submitted where so required by the institution; and the bidder was not involved in the drafting of the specifications or terms of reference for this bid.

² Joint venture or Consortium means an association of persons for the purpose of combining their expertise, property, capital, efforts, skill and knowledge in an activity for the execution of a contract.

- 3.6 I am aware that, in addition and without prejudice to any other remedy provided to combat any restrictive practices related to bids and contracts, bids that are suspicious will be reported to the Competition Commission for investigation and possible imposition of administrative penalties in terms of section 59 of the Competition Act No 89 of 1998 and or may be reported to the National Prosecuting Authority (NPA) for criminal investigation and or may be restricted from conducting business with the public sector for a period not exceeding ten (10) years in terms of the Prevention and Combating of Corrupt Activities Act No 12 of 2004 or any other applicable legislation.

I CERTIFY THAT THE INFORMATION FURNISHED IN PARAGRAPHS 1, 2 and 3 ABOVE IS CORRECT.

I ACCEPT THAT THE STATE MAY REJECT THE BID OR ACT AGAINST ME IN TERMS OF PARAGRAPH 6 OF PFMA SCM INSTRUCTION 03 OF 2021/22 ON PREVENTING AND COMBATING ABUSE IN THE SUPPLY CHAIN MANAGEMENT SYSTEM SHOULD THIS DECLARATION PROVE TO BE FALSE.

.....	
Signature	Date

.....	
Position	Name of bidder

Test Method	Primer Name	Primer/Probe Sequence 5'-3'
PS rt-RT-PCR	Ag.VP-7F	5'-CCA GTA GGC CAG ATC AAC AG-3'
	Ag.VP7-R	5'-CTA ATG AAA GCG GTG ACC GT-3'
	Ag.VP7-Pr	5'-FAM GCT AGC AGC CTA CCA CTA -BHQ-3'
BVT rt-RT-PCR	BTV_IVI_F	TGG AYA AAG CRA TGT CAA A
	BTV_IVI_R	ACR TCA TCA CGA AAC GCT TC
	BTV_IVI_P	FAM-ARG CTG CAT TCG CAT CGT ACG C-BHQ1
EEV	VP3 F:	CTG CGT GAT GGA GGT TAA AGG
	VP3 R:	GCA AAC ATA GAT AAT ATA GGG CCA TT
	VP3 Pr	FAM-AGC TTG TCT CCC TCT AAR TGT GGY GCG T-BHQ
	Lepto-F	5'-CCC GCG TCC GAT TAG -3'
LEPTOSPIRA	Lepto-R	5'-TCC ATT GTG GCC CGR ACA C -3'
	Lepto-P	5'-FAM CTC ACC AAG GCG ACG ATC GGT AGC-BHQ-3'
	M+4100	5'-AGT GAT GTG CTC GGA CCT TC-3'
NDV rt-RT-PCR	M-4220	5'-CCT GAG GAG AGG CAT TTG CTA-3'
	M +4619	5'[FAM] TTC TCT AGC AGT GGG ACA GCC TGC [BHQ-1]-3'
	RV-S	5'-AAA GGA ACA ATG GAC TCT GGT CA-3'
RVFV rt-RT-PCR	RV-A	5'-CAC TTC TTA CTA CCA TGT CCT CCA AT-3'
	RV Pro	5'-FAM AAA GCT TTG ATA TCT CTC AGT GCC CCA A -BHQ-3'
	ACT-1005-F	5'-CAG CAC AAT GAA GAT CAA GAT CAT C-3'
Beta globin	ACT-1135-R	5'-CGG ACT CAT CGT ACT CCTGCT T3'
	ACT-1081-HEX	5'-HEX-TCG CTG TCC ACC TTC CAG CAG ATG T-BHQ1-3'
LSDV PCR	LSD68F	TTAGATCCAAAAAGAGGAGGAAACG
	LSD68R	CATTGGTCAGGGAATGGACATC
	LSD68Pr	5'-FAM-TAGCACATTTGATTTATTAAAGCAA-BHQ-3'
NDV pathotype	F4804	GCATACAACAGAACAYTGAC
	RT7	GGAGGATGTTGGCAGC
	F4804 Lin6	GCATACAATAGGACBCCTTACAAC
	VRP1	[FAM] CCTATAA <u>A</u> ICGITTCTGICTCCTTCC[BHQ1]
	ARP3	[HEX] CCTATAA <u>G</u> ICGICCCCTGTITCCCC[BHQ1]

ARP6	[HEX] CCTACCAAACGGCTCCTGCCGTTTC[BHQ1] NOTE: I = inosine Bold and underlined base = Locked nucleic acid (LNA)	
SNF 1	5'-GTA TCC GAA AGC AGC CCC AGT ATC-3'	
SNR 1	5'-ACA GCT GGG GCA GGA TTA CAG AC-3'	
SNF 2	5'-AGC ACA GTT TAT TTC AGA C-3'	
SNR 2	5'-GAT AAG CAC CAG TTA TGC-3'	
WBN 1	5'-CGT ACC CAC TGG GTA AG-3'	
WR	5'-GGC CTA TCC TAT AAG AC-3'	
MCF WA/SA		
OP72	5'- TGG CAC GAA GAC ATG -3'	
OP73	5'- CTC TCA TCG CCA ATG -3'	
PCV6	5'- AGA GTA TGT GGT GTC -3'	
gB-F	TGT GGA CCT AAA CCT CAC GGT	
BHV-PRO	FAM-AGG ACC GCG AGT TCT TGC CGC-BHQ	
gB-R	GTA GTC GAG CAG ACC CGT GTC	
BHV		
EHV-1	5'-GCG AGA TGT GGT TGC CTA ATC TCG-3'	
EHV-4	5'-AGC CAC GAA CAA CTC AAC CGA TGT-3'	
EHV-R	5'-GAG ACG GTA ACG CTG GTA CTG TTA A-3'	
EHV		
ALLs	5'- TTG ATG GCA GGC CTC TTG C -3'	
ALLe	5'- GGA GGA TGT TGG CAG CAT T -3'	
VLTe	5'- AGC GT(C/T) TCT GTC TCC T -3'	
AVLe	5'- G(A/G)C G(A/T)C CCT GT(C/T) TCC C -3'	
PPMV	5'- TAA AGC GYT TCT KCC T -3'	
NDV HN-RT-PCR		
BE-F1	CCTACATTGAGAGTGCCACA	
BE-R1	CTTCCGTGAACAGCAACATC	
BE-F2	TGAGAGTGCCACAAAGGTAA	
BE-R2	GCAGAGCGACCTAATCTATA	
BEFV RT-PCR		
ChI-D1	5' -CAA ACT CAT CAG ACG AG -3'	
ChI-D2	5' -CCT TCT TTA AGA GGT TTT ACC -3'	
ChI-Ab	5' -TCA GTG CCA ATC CGT CGA TA -3'	
ChI-Av	5' -GAC AAG AAC AAA AAC ATA CTG AA -3'	
ChI-Pc	5' -TAT TGC AAA TGC AGA ATC TAA GC -3'	
CHL HN-PCR		



10 nmol scale of synthesis

