

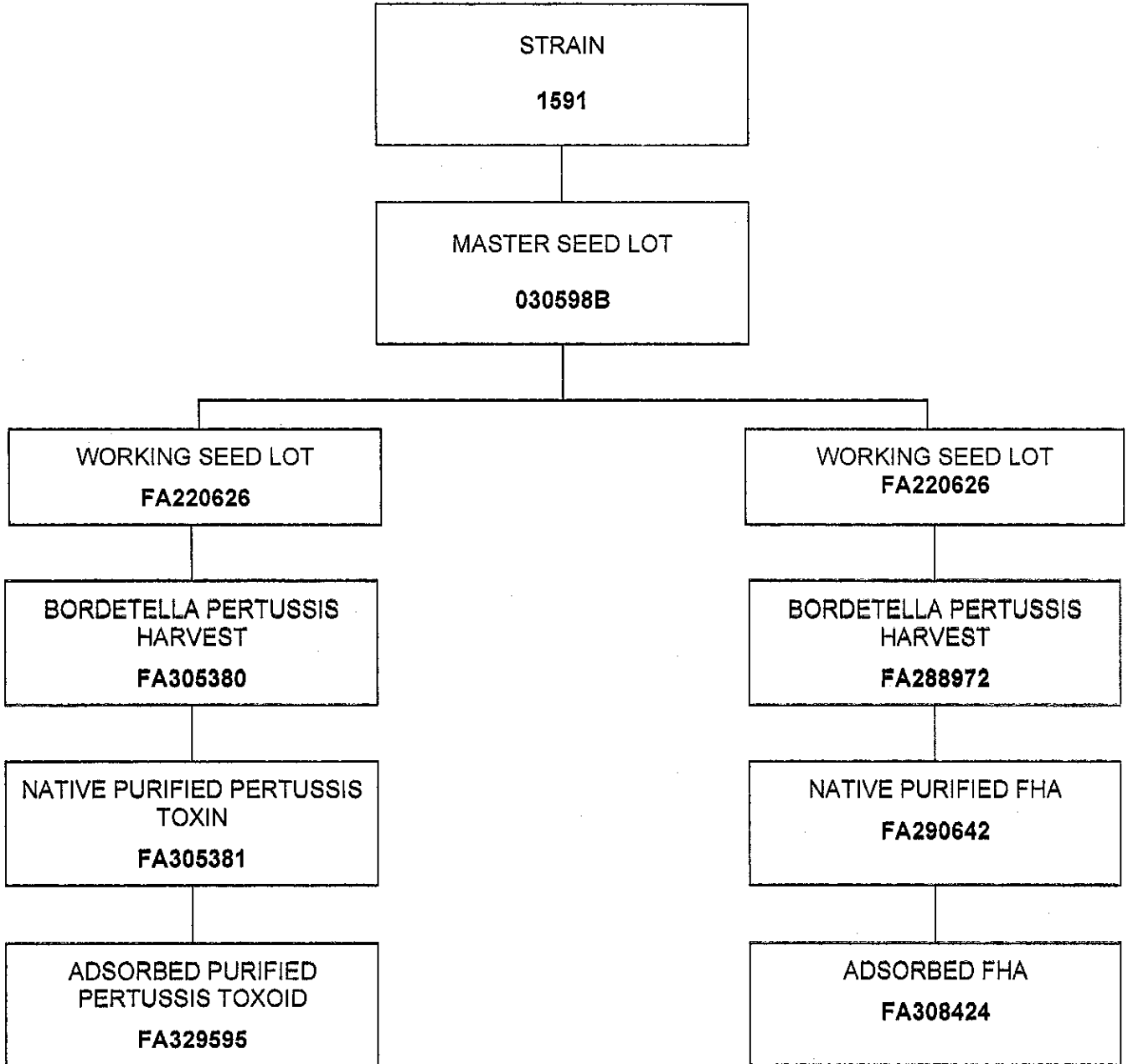
sanofi pasteur

Product Quality and Disposition Department



The vaccines division of sanofi-aventis Group

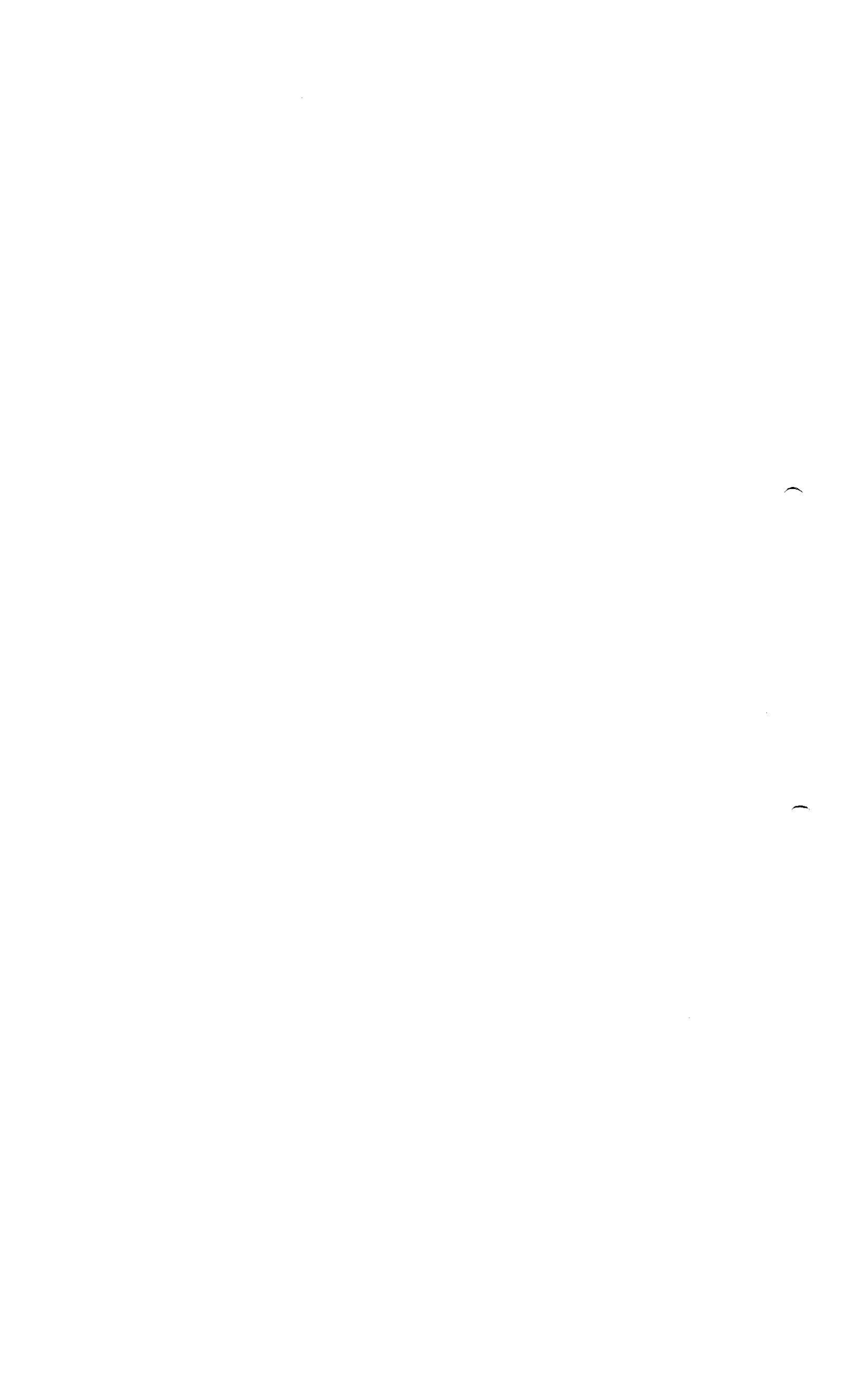
Diphtheria, tetanus, pertussis (acellular, component), hepatitis B (rDNA), poliomyelitis (inactivated) and Haemophilus influenzae type b conjugate vaccine (adsorbed) lot n° S4312 (clinical batch)

29/229



PRODUCTION FLOW SHEET



 ROXANA MONTEMILONE CHRISTIAN DOMÍNGUEZ
 DIRECTORA TÉCNICA PRODERADO
 SANOFI PASTEUR S.A. SANOFI PASTEUR S.A.





sanofi pasteur

The vaccines division of sanofi-aventis Group

Product Quality and Disposition Department.

Diphtheria, tetanus, pertussis (acellular, component),
hepatitis B (rDNA), poliomyelitis (inactivated) and Haemophilus
influenzae type b conjugate vaccine (adsorbed) lot n° S4312 (clinical batch)

30/229

BORDETELLA PERTUSSIS
Strain : Bordetella pertussis 1591

STRAIN

Name	: Pillemer 134
Origin	: Dr N.W. Preston University of Manchester England
Received	: 07.03.69
Institut Mérieux number	: IM 1591

BORDETELLA PERTUSSIS
Master seed lot n° 030598B

Strain number	: 1591
Preparation date	: 03.05.98
Release date	: 16.10.98

CONTROLS

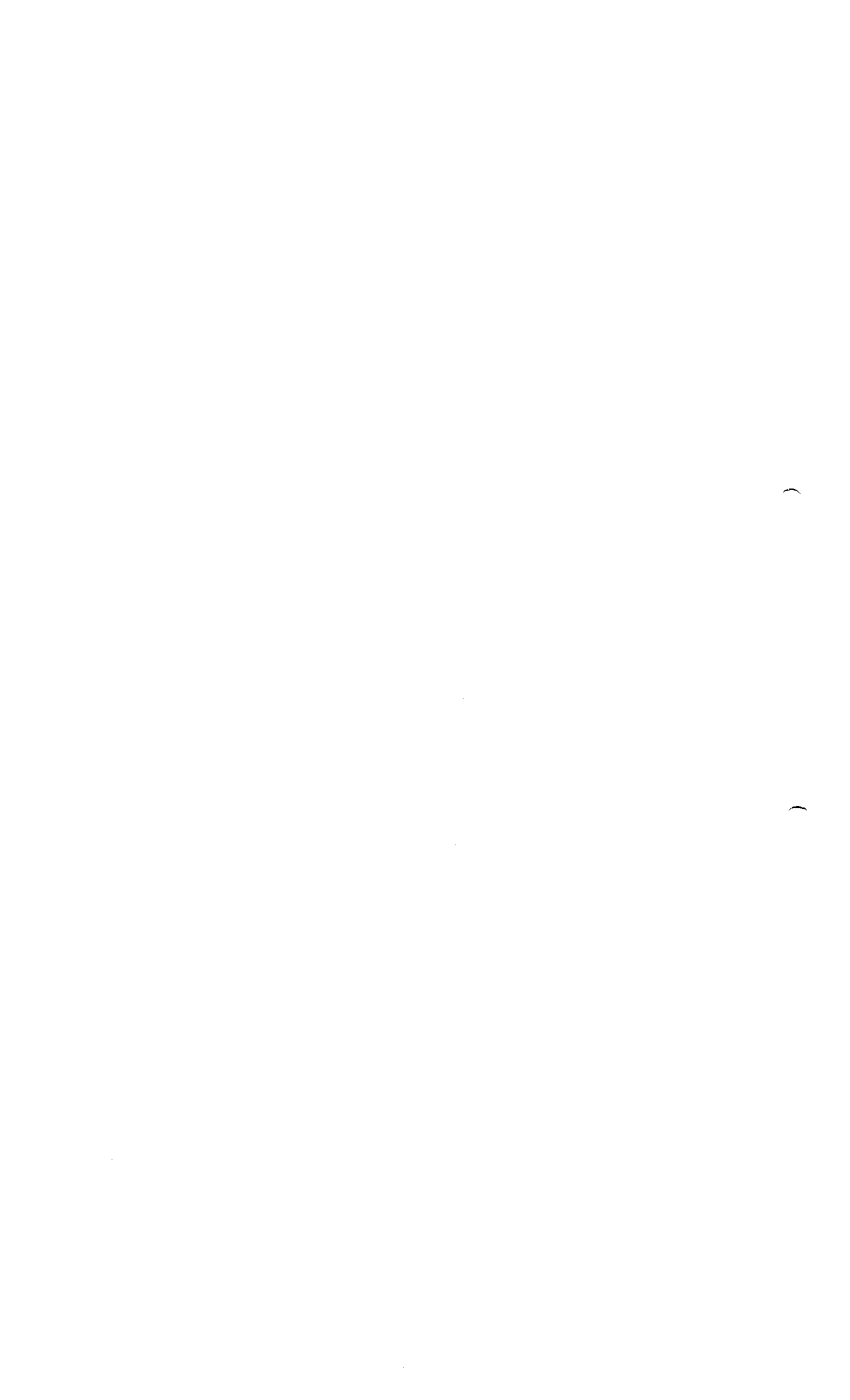
Purity

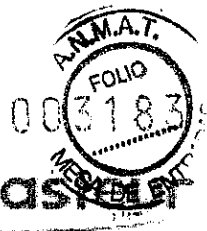
Identification

- Morphology
- Growth characteristics
- Biochemical characteristics
- Antigenic characteristics


ROXANA MONTEMILOME
DIRECTORA TÉCNICA
SANOFI PASTEUR S.A.


CHRISTIAN DOMINGUEZ
ENCUADERADO
SANOFI PASTEUR S.A.





sanofi pasteur

Product Quality and Disposition Department

The vaccines division of sanofi-aventis Group

Diphtheria, tetanus, pertussis (acellular, component),
hepatitis B (rDNA), poliomyelitis (inactivated) and Haemophilus
influenzae type b conjugate vaccine (adsorbed) lot n° S4312 (clinical batch)

31/229


BORDETELLA PERTUSSIS
Working seed lot n° FA220626


Master seed lot : 030598B
Preparation date : 30.09.05
Release date : 07.12.05

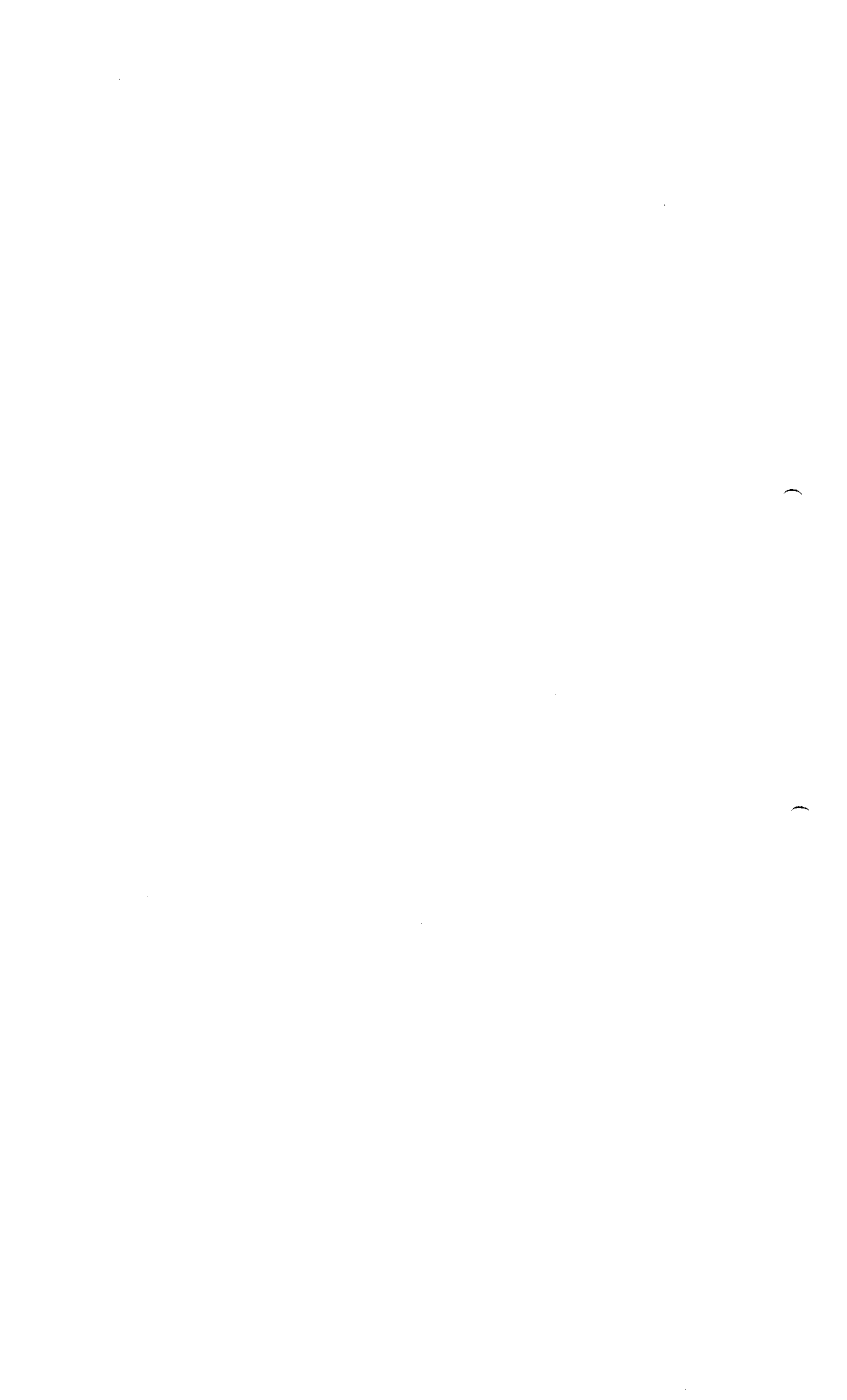
CONTROLS

- Purity
- Identification
 - Morphology
 - Growth characteristics
 - Biochemical characteristics
 - Antigenic characteristics

The tests results show that working seed lot has the same characteristics as the master seed lot.


ROXANA MONTEMILONE
DIRECTORA TÉCNICA
SANOFI PASTEUR S.A.


CHRISTIAN DOMÍNGUEZ
MODERADO
SANOFI PASTEUR S.A.





sanofi pasteur

The vaccines division of sanofi-aventis Group

Product Quality and Disposition Department

Diphtheria, tetanus, pertussis (acellular, component),
hepatitis B (rDNA), poliomyelitis (inactivated) and Haemophilus
influenzae type b conjugate vaccine (adsorbed) lot n° S4312 (clinical batch)

32/229

Bordetella pertussis harvest
Lot n° FA305380

Strain : 1591
Working seed lot number : FA220626
Date of reconstitution of working seed lot ampoules: 14.03.08
Medium used : SS-SAT
Temperature incubation : 36°C +/- 1°C

Harvest

Date of inoculation : 19.03.08
Date of harvest : 21.03.08
Volume : 1236 liters

CONTROLS

Bacterial purity

Method : Gram staining
Result : Gram negative bacilli

Bordetella pertussis harvest
Lot n° FA288972

Strain : 1591
Working seed lot number : FA220626
Date of reconstitution of working seed lot ampoules: 12.10.07
Medium used : SS-SAT
Temperature incubation : 36°C +/- 1°C

Harvest

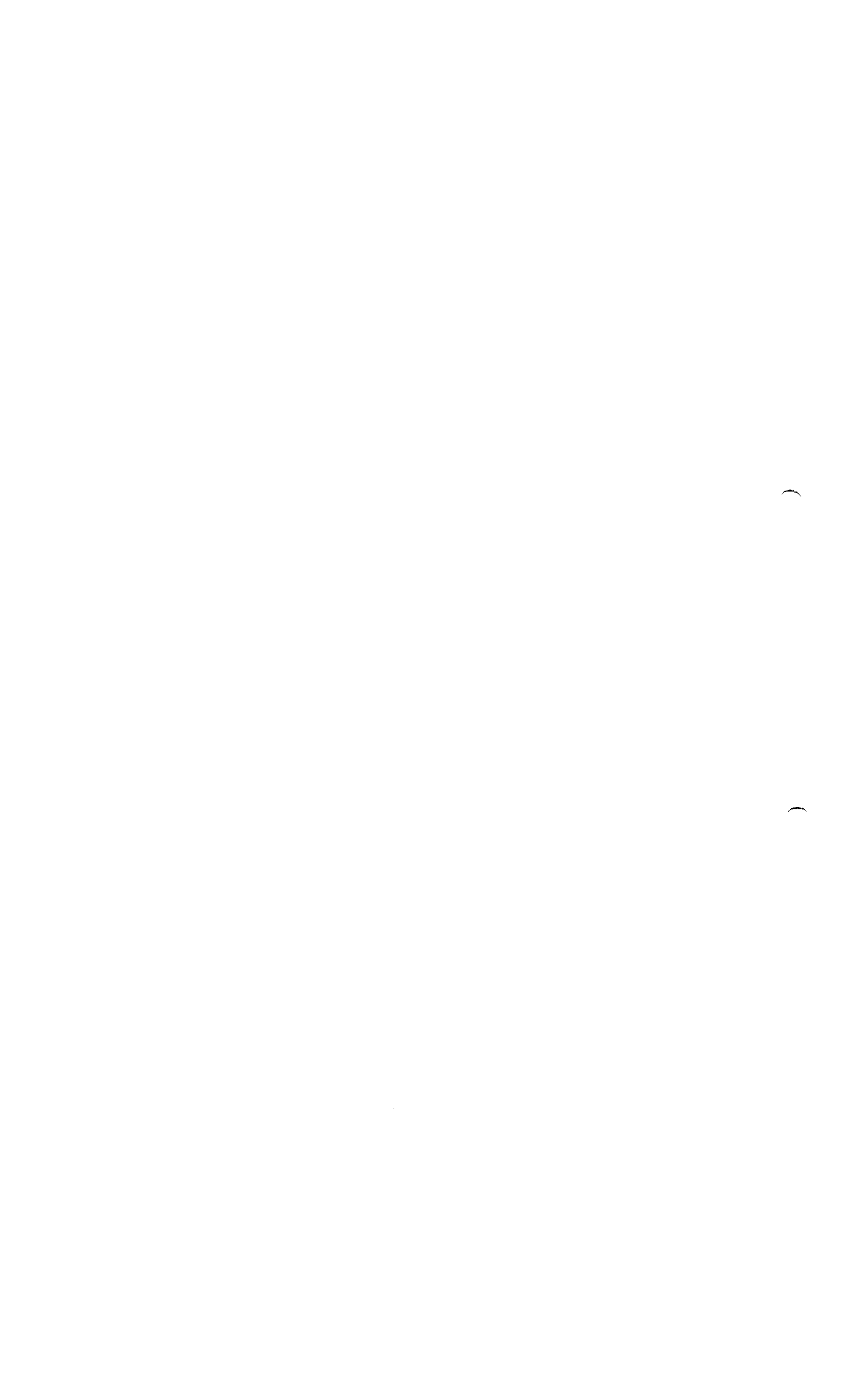
Date of inoculation : 17.10.07
Date of harvest : 19.10.07
Volume : 1212 liters

CONTROLS

Bacterial purity

Method : Gram staining
Result : Gram negative bacilli

ROXANA MONTEMILONE DIRECTORA TÉCNICA SANOFI PASTEUR S.A.
CHRISTIAN DOMÍNGUEZ ACCERADO SANOFI PASTEUR S.A.



Product Quality and Disposition Department

Diphtheria, tetanus, pertussis (acellular, component),
 hepatitis B (rDNA), poliomyelitis (inactivated) and Haemophilus
 influenzae type b conjugate vaccine (adsorbed) lot n° S4312 (clinical batch)

33/229

NATIVE PURIFIED PERTUSSIS TOXIN

TESTS	SPECIFICATIONS
PROTEIN CONTENT	For calculation
SDS-PAGE	Electrophoresis profile comparable to the profile of the reference (5 bands between 30 and 14 kDa)
PERTUSSIS TOXIN IDENTIFICATION	Positive
CLUSTERING ACTIVITY ON CHO CELLS	Cytopathic activity (CPU/ μ g of protein) \geq lower confidence limit (P = 0.95) of cytopathic activity of the reference.
HAEMAGGLUTINATING ACTIVITY	20 000 – 500 000 HAU/mg of protein IHA with cholesterol : \leq 20 %



ROXANA MONTEMILOME
 DIRECTORA TÉCNICA
 SANOFI PASTEUR S.A.



CHRISTIAN DOMINGUEZ
 ACCORDADO
 SANOFI PASTEUR S.A.



sanofi pasteur

The vaccines division of sanofi-aventis Group

Product Quality and Disposition Department

Diphtheria, tetanus, pertussis (acellular, component), hepatitis B (rDNA), poliomyelitis (inactivated) and Haemophilus influenzae type b conjugate vaccine (adsorbed) lot n° S4312 (clinical batch)

34/229

NATIVE PURIFIED PERTUSSIS TOXIN
Lot number : FA305381

Date of manufacture : 21.04.2008
Storage temperature : + 5°C ± 3°C
Expiry date : 21 APRIL 2012
Volume : 18.460 liters

CONTROLS :

Protein content

Method : Spectrophotometry
Date : 24.04.08
Result : 1172.39 µg/ml

SDS-page

Method : Polyacrylamide Gel Electrophoresis
Date : 29.05.08
Result : Electrophoresis profile comparable to the profile of the reference (5 bands between 30 and 14 kDa) - Conforms.

Pertussis toxin identification

Method : Double Diffusion in Gel
Date : 20.05.08
Result : Positive - Conforms

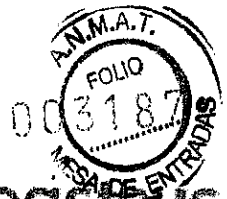
Clustering activity on Chinese Hamster Ovary cells

Method : Clusters Assay on CHO Cells
Date : 07.05.08

	CPU/µg
Reference 90/518	102400
Product	179200

Result : Conforms

ROXANA MONTEMILONE DIRECTORA TÉCNICA SANOFI PASTEUR S.A.
CHRISTIAN DOMINGUEZ ALBERADO SANOFI PASTEUR S.A.



sanofi pasteur

The vaccines division of sanofi-aventis Group

Product Quality and Disposition Department

Diphtheria, tetanus, pertussis (acellular, component),
hepatitis B (rDNA), poliomyelitis (inactivated) and Haemophilus
influenzae type b conjugate vaccine (adsorbed) lot n° S4312 (clinical batch)

35/229

Haemagglutinating activity

Method	: Haemagglutination of goose red blood cells by PT
Date	: 14.05.08
Result	: 102191 HAU/mg
	IHA with cholesterol : 0 % - Conforms

	
ROXANA MONTEMILONE DIRECTORA TÉCNICA SANOFI PASTEUR S.A.	CHRISTIAN DOMINGUEZ APODERADO SANOFI PASTEUR S.A.

