

## CERTIFICATE OF ANALYSIS SWEDEN

Product: **OCTAGAM Intravenous Immunoglobulin human 5 % SD**  
 Manufacturing batch no.: **M849A8446**  
 Filling size: **200 ml**  
 Internal Code: **84383**  
 Man. Date: **12/2018**  
 Exp. Date: **11/2020**  
 Date of start of period of validity: 2018-12-08

TEST	SPECIFICATION <sup>1</sup>	RESULT
<b>Characters</b>		
Clarity	The liquid preparation is clear or not more opalescent than the reference suspension II	APPROVED
Coloration	The liquid preparation is colourless or not more intensely coloured than reference solution Y5	>Y7
<b>Identification</b>		
Immunoelectrophoresis	Immunoglobulin precipitation bands	APPROVED
<b>Tests</b>		
pH value	5.1 – 6.0	5.4
Osmolality, mosmol/kg	≥ 240	337
Total protein, % (m/V)	4.5 – 5.5	5.0
Protein composition, %Ig	≥ 95	98
Molecular size distribution, % of the total chromatogram area		
Polymers	≤ 3.0	< 0.3
Monomers and dimers	≥ 90.0	99.8
Anticomplementary activity, CH <sub>50</sub> /mg Ig	≤ 1.00	0.56
Prekallikrein activator, I.U./mL	≤ 35.0	< 2.0
PKA-blank, I.U./mL	≤ 10.0	< 2.0
Hemagglutinins, Anti-A	≤ 64	8
Hemagglutinins, Anti-B	≤ 64	4

Octapharma AB  
 SE-112 75 Stockholm  
 Sweden  
 Visiting address:  
 Lars Forssells gata 23

Tel +46 8 566 430 00  
 Fax +46 8 566 430 10

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Anti D	Pass test	APPROVED
Sterility	Sterile	APPROVED
Endotoxin, IU/mL	< 0.5	< 0.1
HBsAb, IU/g Ig	≥ 1	54
IgA content, mg/mL	≤ 0.2	0.1
<b>Additional tests</b>		
IgG content, mg/mL	42.8 – 55.0	50.3
IgM content, mg/mL	≤ 0.10	< 0.04
Chloride, mmol/L	≤ 15	8
Sodium, mmol/L	≤ 15	0
Potassium, mmol/L	≤ 1.0	< 0.1
Aluminium, µg/L	≤ 200	< 30
Maltose, mg/mL	90 – 110	97
Tri(n-butyl)phosphate, µg/mL	≤ 1.0	< 0.3
Octoxynol, µg/mL	≤ 5.0	< 0.5
HAV Ab, IU/mL	≥ 2.5	8.4
Parvo B19 Ab, IU/mL	≥ 60	151

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Factor XIa-like activity: (referring to a 5% Total Protein solution), mIU/mL	≤ 2	0

It is certified that the above lot was manufactured according to GMP regulations and fulfills the criteria of production and product testing according to European Pharmacopoeia.

It is certified that all donations of plasma were individually tested and non reactive to HB<sub>s</sub>Ag, HIV-1/HIV-2 Ab, HCV Ab.

Each plasma pool was tested and found negative for HB<sub>s</sub>Ag, HIV-1/HIV-2 Ab and HCV-RNA by Polymerase Chain Reaction method (PCR).

Released.

Stockholm, 2019-01-24  
Octapharma AB

 Göran Jonsäll

Qualified Person / QP Delegate

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