## Medion Grifols Diagnostics Grifols

## Certificate of Analysis

| Product: | Cat.No. | Lot No.: | Expiration date: |
| :--- | :--- | :--- | :--- |
| Essential II Control | $\mathbf{2 1 3 2 8 7 - 7 1}$ | QCS024006 | 2024-04-13 |

Origin: human erythrocytes from blood group $A$ and $B$
Manufacturing Date: 27 FEB 2024
Preservative: Neomycin \& Chloramphenicol
Storage: $2-8^{\circ} \mathrm{C}$
Manufacturing size: $2 \times 2 \times 6 \mathrm{ml}$

| Criterion | Method | Specification | Results |
| :---: | :---: | :---: | :---: |
| Tube QCS1, lot QCS124006 |  |  |  |
| Specificity | Blood group testing by DG Gel | Blood group A ccddee, K positive | Blood group A ccddee, K positive |
|  | Blood group testing by tube technique | Blood group A ccddee, K positive | Blood group A ccddee, K positive |
|  | Reverse-Typing by DG Gel | $\mathrm{A}_{1}$ cells: negative $\mathrm{A}_{2}$ cells: negative B cells: positive O cells: negative | $\mathrm{A}_{1}$ cells: negative A2 cells: negative B cells: positive O cells: negative |
|  | Reverse-Typing by tube technique | $\mathrm{A}_{1}$ cells: negative $\mathrm{A}_{2}$ cells: negative B cells: positive O cells: negative | $\mathrm{A}_{1}$ cells: negative $\mathrm{A}_{2}$ cells: negative B cells: positive O cells: negative |
|  | Direct Antiglobulin Test by DG Gel at release | negative | negative |
|  | Direct Antiglobulin Test by tube technique at release | negative | negative |
| D Antibody screening | IAT test by DG Gel IgG | Ror cells: minimum weak positive; <br> $\mathrm{R}_{1} \mathrm{R}_{1}$ cells: minimum weak positive; <br> $\mathrm{R}_{2} \mathrm{R}_{2}$ cells: minimum weak positive; rr cells: negative | Ror cells: minimum weak positive; <br> $\mathrm{R}_{1} \mathrm{R}_{1}$ cells: minimum weak positive; $\mathrm{R}_{2} \mathrm{R}_{2}$ cells: minimum weak positive; rr cells: negative |
|  | IAT test by tube technique | Ror cells: minimum weak positive; <br> $\mathrm{R}_{1} \mathrm{R}_{1}$ cells: minimum weak positive; <br> $\mathrm{R}_{2} \mathrm{R}_{2}$ cells: minimum weak positive; rr cells: negative | Ror cells: minimum weak positive; $\mathrm{R}_{1} \mathrm{R}_{1}$ cells: minimum weak positive; $\mathrm{R}_{2} \mathrm{R}_{2}$ cells: minimum weak positive; rr cells: negative |
| Concentration of suspension | Determination of Hematocrit | $15.0 \pm 2.0$ \% | 14.9 \% |
| Hemolysis at release | Optical Density at 540 nm | Absorbance $\leq 1.0 \mathrm{AU}$ | Absorbance 0.022 AU |


| Tube QCS2, lot QCS224006 |  |  |  |
| :---: | :---: | :---: | :---: |
| Specificity | Blood group testing by DG Gel | Blood group B CcD.Ee, K negative, Fy ${ }^{\text {a }}$ negative | Blood group B CcD.Ee, K negative, $\mathrm{Fy}^{\mathrm{a}}$ negative |
|  | Blood group testing by tube technique | Blood group B CcD.Ee, K negative | Blood group B CcD.Ee, K negative |
|  | Reverse-Typing by DG Gel | $\mathrm{A}_{1}$ cells: positive $\mathrm{A}_{2}$ cells: positive B cells: negative O cells: negative | $\mathrm{A}_{1}$ cells: positive $\mathrm{A}_{2}$ cells: positive B cells: negative O cells: negative |
|  | Reverse-Typing by tube technique | A cells: positive $\mathrm{A}_{2}$ cells: positive B cells: negative O cells: negative | $\mathrm{A}_{1}$ cells: positive $\mathrm{A}_{2}$ cells: positive B cells: negative O cells: negative |
|  | Direct Antiglobulin Test by DG Gel at release | negative | negative |
|  | Direct Antiglobulin Test by tube technique at release | negative | negative |
| Fy ${ }^{\text {a }}$ Antibody screening | IAT test by DG Gel with Screen-Cyte | Screening cells Fya positive : positive Screening cells Fya negative: negative | Screening cells Fya positive: positive Screening cells Fya negative: negative |
|  | IAT test by tube technique with Screen-Cyte cells | Screening cells Fya positive : positive Screening cells Fya negative: negative | Screening cells Fy ${ }^{\text {a }}$ positive: positive Screening cells Fya negative: negative |
| Concentration of suspension | Determination of Hematocrit | $15.0 \pm 2.0$ \% | 14.7 \% |
| Hemolysis after filling | Optical Density at 540 nm | Absorbance $\leq 1.0 \mathrm{AU}$ | Absorbance 0.035 AU |

## The product passed the internal Quality Control procedure.

## All human source material used in the manufacture of this product were tested and found negative for HBsAg and antibodies to HCV, HIV-1/ HIV-2.

Date: 1 March 2024


Sascha Feuerhahn
Technical Director

