



ClinChek® - Control

Whole Blood Control (filter spot) / Vollblut-Kontrolle (Filterspot)

FOR ACYLCARNITINES AND AMINO ACIDS / FÜR ACYLCARNITINE UND AMINOSÄUREN

Intended use:

ClinChek® whole blood controls are used for internal quality assurance in clinical-chemical laboratories. These filter spot controls are manufactured especially for laboratories that are working in the field of neonatal screening. The controls are based on human whole blood and are available in two different ranges of concentration.

Pretreatment:

After having stamped a defined punching out of the blood spot, it has to be prepared like patient samples in one series of analyses. Please note that the blood volume that was used for creating one spot on the filter paper is exactly **100 µl**. The diameter of one filter spot is **18 mm**. If you use punchings of smaller diameters, you have to calculate the corresponding blood volume of it (**area ratio!**).

Storage and stability:

Originally closed and stored at 2 - 8 °C the dry whole blood control on filter paper is stable for 36 months, but not longer than the expiration date printed on the label.

Zweckbestimmung:

ClinChek® Vollblut-Kontrollen dienen der internen Qualitätssicherung im klinisch-chemischen Laboratorium. Diese Filterspot-Kontrollen wurden speziell für Laboratorien hergestellt, die Analysen im Rahmen des Neugeborenen-Screenings durchführen. Die Kontrollen sind aus humanem Vollblut hergestellt und sind in zwei verschiedenen Konzentrationsbereichen erhältlich.

Vorbehandlung:

Nachdem ein definiertes Scheibchen aus dem Blutspot gestanzt wurde, wird es wie eine Patientenprobe in einer Analysenserie behandelt. Bitte beachten Sie, dass das Blutvolumen, das zur Herstellung eines Blutspots eingesetzt wurde, exakt **100 µl** beträgt. Der Durchmesser eines Spots auf dem Filterpapier beträgt **18 mm**. Wenn Sie Stanzlinge mit geringerem Durchmesser verwenden, müssen Sie das entsprechende Blutvolumen berechnen (**Flächenverhältnis!**).

Lagerung und Haltbarkeit:

Originalverschlossen und bei 2 - 8 °C aufbewahrt beträgt die Haltbarkeit der trockenen Vollblut-Filterpapier-Kontrolle 36 Monate, jedoch nur bis zu dem auf der Packung angegebenen Verfallsdatum.

Before opening the cooled control pack, you have to temper it to room temperature, to protect against condensed water. The pack includes a pouch with desiccant (orangegeel), which serves as indicator for moisture simultaneously. In the dry status the gel is coloured orange. If the capacity for water absorption is expended, the desiccant will change to blue. Then the material must be regenerated by heating for at least 5 hours at 70 °C in a cabinet dryer. After cooling down, it should be enclosed to the filter cards in the aluminium bag.

Opened control packs can be stored until the expiration date, printed on the label, if they are stored dry and at 2 - 8 °C.

Notes:

The concentrations of the analytes are chosen in relevant ranges. According to quality assurance all ClinChek® controls have to pass strict quality control procedures during manufacturing. RECIPE guarantees the same stability and constitution for each filter test card of one lot. The deviation of the volume per blood spot is < 1 %.

Mean values:

The mean values and confidence intervals have been established in an additional independent reference laboratory with supervision of RECIPE, according to the guideline of the German Medical Council for quality assurance (RiliBak) with statistical methods. The determination of the analytes was performed by LC-MS/MS (derivatised).

Pack size:

ClinChek® Whole Blood Control (filter spot)
Level I, II
2 x 1 x 3 spots, **order no.: 10182**

Precautions:

The human whole blood which was used for manufacturing the controls was tested for the following infectious markers and found negative: HIV1/2-, HBV- and HCV-antibodies, hepatitis B-surface antigen, HIV1- and HCV-RNA, HBV-DNA (NAT). Nevertheless, the controls should be considered as potentially infectious and treated with appropriate care.

Sollwerte:

Die Sollwerte und Vertrauensbereiche wurden unter der Leitung von RECIPE in einem zusätzlichen unabhängigen Referenzlaboratorium entsprechend der Richtlinie der Deutschen Bundesärztekammer zur Qualitätssicherung (RiliBak) mit statistischen Methoden ermittelt. Die Bestimmung der Analyten wurde mittels LC-MS/MS (derivatisiert) durchgeführt.

Packungsgröße:

ClinChek® Vollblut-Kontrolle (Filterspot)
Level I, II
2 x 1 x 3 Spots, **Best.-Nr.: 10182**

Vorsichtsmaßnahmen:

Das zur Herstellung der Kontrollen verwendete Vollblut humanen Ursprungs wurde auf folgende Infektionsmarker untersucht und für negativ befunden: HIV1/2-, HBV- und HCV-Antikörper, Hepatitis B-Oberflächenantigen, HIV1- und HCV-RNA, HBV-DNA (NAT). Unabhängig davon sollten die Kontrollen als potentiell infektiös angesehen und mit angemessener Sorgfalt behandelt werden.

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REF 10182
LOT 427
 2017-07

Acylcarnitines / Acylcarnitine:

Analyte / Analyt	Unit / Einheit	Mean Value / Sollwert	Control Range / Kontrollbereich	Unit / Einheit	Mean Value / Sollwert	Control Range / Kontrollbereich
C0-Carnitine (Carnitine) Level I Level II	mg/l mg/l	5.72 21.3	3.15 - 8.30 11.7 - 30.8	µmol/l µmol/l	35.5 132	19.5 - 51.5 72.5 - 191
C2-Carnitine (Acetyl carnitine) Level I Level II	mg/l mg/l	1.16 15.2	0.465 - 1.86 10.6 - 19.8	µmol/l µmol/l	5.72 74.8	2.29 - 9.15 52.4 - 97.3
C3-Carnitine (Propionyl carnitine) Level I Level II	mg/l mg/l	0.436 2.74	0.261 - 0.610 1.91 - 3.56	µmol/l µmol/l	2.01 12.6	1.20 - 2.81 8.81 - 16.4
C4-Carnitine (Butyryl carnitine) Level I Level II	mg/l mg/l	0.238 2.18	0.143 - 0.334 1.42 - 2.94	µmol/l µmol/l	1.03 9.43	0.618 - 1.44 6.13 - 12.7
C5-Carnitine (Isovaleryl carnitine) Level I Level II	mg/l mg/l	0.131 0.602	0.079 - 0.183 0.391 - 0.813	µmol/l µmol/l	0.534 2.45	0.321 - 0.748 1.60 - 3.31
C5DC-Carnitine (Glutaryl carnitine) Level I Level II	mg/l mg/l	0.290 1.09	0.116 - 0.464 0.547 - 1.64	µmol/l µmol/l	1.05 3.96	0.420 - 1.68 1.98 - 5.94
C6-Carnitine (Hexanoyl carnitine) Level I Level II	mg/l mg/l	0.117 0.308	0.070 - 0.164 0.216 - 0.401	µmol/l µmol/l	0.451 1.19	0.270 - 0.631 0.832 - 1.54
C8-Carnitine (Octanoyl carnitine) Level I Level II	mg/l mg/l	0.123 0.634	0.049 - 0.197 0.285 - 0.982	µmol/l µmol/l	0.428 2.21	0.171 - 0.685 0.992 - 3.42
C10-Carnitine (Decanoyl carnitine) Level I Level II	mg/l mg/l	0.107 0.483	0.054 - 0.161 0.193 - 0.773	µmol/l µmol/l	0.340 1.53	0.170 - 0.509 0.612 - 2.45
C12-Carnitine (Dodecanoyl carnitine) Level I Level II	mg/l mg/l	0.157 2.35	0.094 - 0.220 1.65 - 3.06	µmol/l µmol/l	0.457 6.85	0.274 - 0.640 4.79 - 8.90
C14-Carnitine (Tetradecanoyl carnitine) Level I Level II	mg/l mg/l	0.167 1.29	0.100 - 0.234 0.515 - 2.06	µmol/l µmol/l	0.450 3.46	0.270 - 0.630 1.39 - 5.54
C16-Carnitine (Hexadecanoyl carnitine) Level I Level II	mg/l mg/l	0.534 4.48	0.267 - 0.801 2.24 - 6.71	µmol/l µmol/l	1.34 11.2	0.669 - 2.01 5.60 - 16.8
C18-Carnitine (Octadecanoyl carnitine) Level I Level II	mg/l mg/l	0.252 1.74	0.151 - 0.352 1.13 - 2.35	µmol/l µmol/l	0.588 4.08	0.353 - 0.824 2.65 - 5.51



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Amino Acids / Aminosäuren:

Analyte / Analyt	Unit / Einheit	Mean Value / Sollwert	Control Range / Kontrollbereich	Unit / Einheit	Mean Value / Sollwert	Control Range / Kontrollbereich
Alanine / Alanin						
Level I	mg/l	40.0	26.0 - 54.0	µmol/l	449	292 - 607
Level II	mg/l	93.3	65.3 - 121	µmol/l	1048	733 - 1362
Arginine / Arginin						
Level I	mg/l	1.28	0.512 - 2.05	µmol/l	7.34	2.94 - 11.8
Level II	mg/l	8.72	3.92 - 13.5	µmol/l	50.0	22.5 - 77.6
Aspartic Acid / Asparaginsäure						
Level I	mg/l	5.50	3.85 - 7.15	µmol/l	41.3	28.9 - 53.7
Level II	mg/l	18.5	12.9 - 24.0	µmol/l	139	97.3 - 181
Citrulline / Citrullin						
Level I	mg/l	3.26	1.79 - 4.72	µmol/l	18.6	10.2 - 26.9
Level II	mg/l	36.8	16.6 - 57.1	µmol/l	210	94.5 - 326
Glutamic Acid / Glutaminsäure						
Level I	mg/l	47.7	33.4 - 62.0	µmol/l	324	227 - 421
Level II	mg/l	94.6	66.2 - 123	µmol/l	643	450 - 836
Glycine / Glycin						
Level I	mg/l	29.3	14.6 - 43.9	µmol/l	390	195 - 585
Level II	mg/l	99.4	54.7 - 144	µmol/l	1324	728 - 1920
Leucine / Leucin						
Level I	mg/l	23.6	14.1 - 33.0	µmol/l	180	108 - 252
Level II	mg/l	80.6	56.5 - 105	µmol/l	615	430 - 799
Methionine / Methionin						
Level I	mg/l	4.14	2.49 - 5.80	µmol/l	27.8	16.7 - 38.9
Level II	mg/l	53.9	32.4 - 75.5	µmol/l	362	217 - 506
Ornithine / Ornithin						
Level I	mg/l	14.1	8.46 - 19.7	µmol/l	107	64.0 - 149
Level II	mg/l	47.2	33.1 - 61.4	µmol/l	358	250 - 465
Phenylalanine / Phenylalanin						
Level I	mg/l	13.8	9.63 - 17.9	µmol/l	83.3	58.3 - 108
Level II	mg/l	117	82.0 - 152	µmol/l	709	497 - 922
Proline / Prolin						
Level I	mg/l	26.0	15.6 - 36.4	µmol/l	226	135 - 316
Level II	mg/l	22.9	14.9 - 30.9	µmol/l	199	129 - 269
Tyrosine / Tyrosin						
Level I	mg/l	13.5	7.43 - 19.6	µmol/l	74.6	41.0 - 108
Level II	mg/l	100	55.0 - 145	µmol/l	552	303 - 800
Valine / Valin						
Level I	mg/l	23.7	9.48 - 37.9	µmol/l	202	81.0 - 324
Level II	mg/l	64.6	29.1 - 100	µmol/l	552	248 - 855

