



## DEKS

Rigshospitalet - Glostrup  
Nordre Ringvej 57  
2600 Glostrup  
Denmark  
Tlf. 3863 4400  
www.deks.dk

Reporting Period:  
18.04. 2017 - 09.05. 2017

EQA-koordinator:  
Sanne Schou  
sanne.schou@deks.dk  
3863 4405  
Gitte Marie Henriksen  
gitte.m.henriksen@deks.dk  
3863 4401

This report includes:

- This letter
- Individual results

Approved by GMH  
2017

Next round

30.05.2017 – 20.06.2017

# Methylmalonic Acid 3033DK EQA rapport 2/ 2017

## Participants

There are 46 laboratories registered for this scheme. Most of the participants are from the Scandinavian countries and 11 laboratories are from other countries. DEKS received results from 42 participants for this report.

## Samples

Sample no. 03\_2017 "Hce" is a pool of serum. This pool has not been sent before.

Sample no. 04\_2017 "Jce" is a pool of serum. This pool has not been sent before.

## Statistic

In the graphical part you will find your own results and deviation (dev.) from the mean (M).

## Target value

The mean is calculated as mean of all.

## Acceptance

The acceptance interval is  $\pm 21\%$  (imprecision 4 % and bias 8 %). The acceptance interval is calculated on the basis of biological variation.

## Results and comments

In table 1 you can see all method groups based on the reported instrument. They are listed with mean, SD and number of results.

There is 1 outlier found. Outliers are defined as  $>SD \cdot 3,6$  from the overall mean.



Table 1: All method groups based on the reported instrument are listed with mean, SD and number of results.

Component	Mean	Sd	CV	sem	N	Outliers
<b>P-Methylmalonat; stofk. Sample 'Hce'</b>						
<i>Alle</i>	0,254	0,0219	8,64	0,00342	41	1
GC-MS	0,26	0,01517	5,82	0,00457	11	0
LC-MS/MS derivatized	0,238	0,0303	12,76	0,00959	10	0
LC-MS/MS underivatized	0,258	0,01672	6,49	0,00374	20	1
<b>P-Methylmalonat; stofk. Sample 'Jce'</b>						
<i>Alle</i>	0,067	0,0781	8,07	0,01204	42	0
GC-MS	0,064	0,0784	7,89	0,0236	11	0
LC-MS/MS derivatized	0,038	0,0998	10,65	0,0316	10	0
LC-MS/MS underivatized	0,068	0,064	6,62	0,01397	21	0

Kind regards  
Gitte Henriksen og Sanne Schou



P-Methylmalonat; stofk. - Methodgroup: GC-MS		Methodname: Gas Chromatography - Mass Spectrometry (GC-MS) Calibrator: In-house																																																																																												
<p><b>Hce ('03_2017')</b></p> <p>Own result: 0,263 µmol/L (dev. 3,7%)                      Mean of all (M): 0,254 µmol/L                      Acceptance interval (M ± 21%): 0,200 - 0,307 µmol/L</p> <table border="1"> <thead> <tr> <th>Method group</th> <th>Mean</th> <th>sd</th> <th>CV%</th> <th>SEM</th> <th>N</th> </tr> </thead> <tbody> <tr> <td>All</td> <td>0,260</td> <td>0,02</td> <td>5,8</td> <td>0,0</td> <td>11</td> </tr> <tr> <td>All</td> <td>0,254</td> <td>0,02</td> <td>8,6</td> <td>0,0</td> <td>41</td> </tr> </tbody> </table>		Method group	Mean	sd	CV%	SEM	N	All	0,260	0,02	5,8	0,0	11	All	0,254	0,02	8,6	0,0	41	<p><b>Jce ('04_2017')</b></p> <p>Own result: 0,908 µmol/L (dev. -6,1%)                      Mean of all (M): 0,967 µmol/L                      Acceptance interval (M ± 21%): 0,764 - 1,171 µmol/L</p> <table border="1"> <thead> <tr> <th>Method group</th> <th>Mean</th> <th>sd</th> <th>CV%</th> <th>SEM</th> <th>N</th> </tr> </thead> <tbody> <tr> <td>All</td> <td>0,994</td> <td>0,08</td> <td>7,9</td> <td>0,0</td> <td>11</td> </tr> <tr> <td>All</td> <td>0,967</td> <td>0,08</td> <td>8,1</td> <td>0,0</td> <td>42</td> </tr> </tbody> </table>		Method group	Mean	sd	CV%	SEM	N	All	0,994	0,08	7,9	0,0	11	All	0,967	0,08	8,1	0,0	42																																																							
Method group	Mean	sd	CV%	SEM	N																																																																																									
All	0,260	0,02	5,8	0,0	11																																																																																									
All	0,254	0,02	8,6	0,0	41																																																																																									
Method group	Mean	sd	CV%	SEM	N																																																																																									
All	0,994	0,08	7,9	0,0	11																																																																																									
All	0,967	0,08	8,1	0,0	42																																																																																									
<p><b>History</b></p> <table border="1"> <thead> <tr> <th>Round</th> <th>Material</th> <th>Target</th> <th>Own</th> <th>%dif</th> <th>-21%</th> <th>21%</th> </tr> </thead> <tbody> <tr><td>17/02</td><td>Hce</td><td>0,2535</td><td>0,263</td><td>3,7</td><td></td><td></td></tr> <tr><td>17/02</td><td>Jce</td><td>0,9675</td><td>0,908</td><td>-6,1</td><td></td><td></td></tr> <tr><td>17/01</td><td>Gmo</td><td>0,2313</td><td>0,28</td><td>21,0</td><td></td><td></td></tr> <tr><td>17/01</td><td>Gpn</td><td>0,5826</td><td>0,67</td><td>15,0</td><td></td><td></td></tr> <tr><td>16/05</td><td>Hcd</td><td>0,3376</td><td>0,35</td><td>3,7</td><td></td><td></td></tr> <tr><td>16/05</td><td>Hjc</td><td>0,1847</td><td>0,20</td><td>8,3</td><td></td><td></td></tr> <tr><td>16/04</td><td>Imn</td><td>0,4106</td><td>0,43</td><td>4,7</td><td></td><td></td></tr> <tr><td>16/04</td><td>Gsn</td><td>0,2638</td><td>0,29</td><td>10,0</td><td></td><td></td></tr> <tr><td>16/03</td><td>Gpn</td><td>0,5773</td><td>0,561</td><td>-2,8</td><td></td><td></td></tr> <tr><td>16/03</td><td>Hjc</td><td>0,1783</td><td>0,190</td><td>6,6</td><td></td><td></td></tr> <tr><td>16/02</td><td>Hcd</td><td>0,3350</td><td>0,320</td><td>-4,5</td><td></td><td></td></tr> <tr><td>16/02</td><td>Imn</td><td>0,4009</td><td>0,385</td><td>-4,0</td><td></td><td></td></tr> </tbody> </table>		Round	Material	Target	Own	%dif	-21%	21%	17/02	Hce	0,2535	0,263	3,7			17/02	Jce	0,9675	0,908	-6,1			17/01	Gmo	0,2313	0,28	21,0			17/01	Gpn	0,5826	0,67	15,0			16/05	Hcd	0,3376	0,35	3,7			16/05	Hjc	0,1847	0,20	8,3			16/04	Imn	0,4106	0,43	4,7			16/04	Gsn	0,2638	0,29	10,0			16/03	Gpn	0,5773	0,561	-2,8			16/03	Hjc	0,1783	0,190	6,6			16/02	Hcd	0,3350	0,320	-4,5			16/02	Imn	0,4009	0,385	-4,0			<p><b>Youdenplot</b></p>	
Round	Material	Target	Own	%dif	-21%	21%																																																																																								
17/02	Hce	0,2535	0,263	3,7																																																																																										
17/02	Jce	0,9675	0,908	-6,1																																																																																										
17/01	Gmo	0,2313	0,28	21,0																																																																																										
17/01	Gpn	0,5826	0,67	15,0																																																																																										
16/05	Hcd	0,3376	0,35	3,7																																																																																										
16/05	Hjc	0,1847	0,20	8,3																																																																																										
16/04	Imn	0,4106	0,43	4,7																																																																																										
16/04	Gsn	0,2638	0,29	10,0																																																																																										
16/03	Gpn	0,5773	0,561	-2,8																																																																																										
16/03	Hjc	0,1783	0,190	6,6																																																																																										
16/02	Hcd	0,3350	0,320	-4,5																																																																																										
16/02	Imn	0,4009	0,385	-4,0																																																																																										
<p><b>Difference plot</b></p>																																																																																														
<p><b>History for Hce</b></p> <table border="1"> <thead> <tr> <th>Round</th> <th>Target</th> <th>Own</th> <th>%dif</th> <th>-21%</th> <th>21%</th> </tr> </thead> <tbody> <tr> <td>17/02</td> <td>0,254</td> <td>0,263</td> <td>3,7</td> <td></td> <td></td> </tr> </tbody> </table>		Round	Target	Own	%dif	-21%	21%	17/02	0,254	0,263	3,7			<p><b>History for Jce</b></p> <table border="1"> <thead> <tr> <th>Round</th> <th>Target</th> <th>Own</th> <th>%dif</th> <th>-21%</th> <th>21%</th> </tr> </thead> <tbody> <tr> <td>17/02</td> <td>0,967</td> <td>0,908</td> <td>-6,1</td> <td></td> <td></td> </tr> </tbody> </table>		Round	Target	Own	%dif	-21%	21%	17/02	0,967	0,908	-6,1																																																																					
Round	Target	Own	%dif	-21%	21%																																																																																									
17/02	0,254	0,263	3,7																																																																																											
Round	Target	Own	%dif	-21%	21%																																																																																									
17/02	0,967	0,908	-6,1																																																																																											