

# CRM Amino Acids Mixture Standard Solution



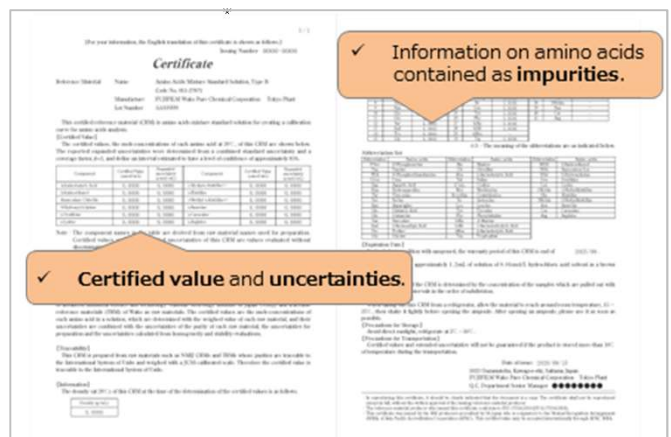
In 2019, FUJIFILM Wako acquired the “Amino acid mixture standard material producer” based on ASNITE certification for the first time in Japan, and have started the production of amino acid CRM that can be “measurement” for amino acid measurement.

We newly released CRM amino acid mixture standard solutions. These products are SI traceable, and the reliability of the measured values is guaranteed internationally.

## Features

- ✓ The first amino acid mixture standard solutions based on ISO 17034 (according to the accreditation program by ASNITE) in Japan
- ✓ Using NMIJ CRM and our SI traceable standard TRM (Traceable Reference Material) as raw material
- ✓ Minimal difference between lots
- ✓ Attached the certificate that describes impurities of amino acids
- ✓ Guaranteed the uncertainty obtained from stability and homogeneity

## Certificate



The certified value, uncertainties, and metrological traceability are described on the certificate. The certificate with the ASNITE accreditation symbol are accepted not only domestically but also internationally by APAC MRA (Mutual Recognition Agreement).

## Products

Code No.	Product Name	Grade	Package Size
018-27881	Amino Acids Mixture Standard Solution, Type H[CRM]	for Amino Acid Automated Analysis	1mL×5A
011-27871	Amino Acids Mixture Standard Solution, Type B[CRM]	for Amino Acid Automated Analysis	1mL×5A
015-27891	Amino Acids Mixture Standard Solution, Type AN[CRM]	for Amino Acid Automated Analysis	1mL×5A

➔Please check our website for the details: <https://labchem-wako.fujifilm.com/us/category/01827.html>

## Composition

Type	P-Ser	Tau	PEA	Urea	Asp	Hyp	Thr	Ser	Asn	Glu	Gln	Sar	Aad	Pro	Gly	Ala	Cit	Abu	Val	(Cys) <sub>2</sub>	Met
H					✓		✓	✓		✓				✓	✓	✓			✓	✓	✓
B																					
AN	✓	✓	✓	✓	✓	✓	✓	✓		✓		✓		✓	✓	✓	✓	✓	✓	✓	✓
Type	Hcy (Ala)	Ile	Leu	Tyr	Phe	b Ala	b Aib	4 Abu	Trp	MEA	NH <sub>4</sub>	5 Hyl	Orn	Lys	1Me his	His	3Me his	Ans	Car	Arg	
H		✓	✓	✓	✓						✓			✓		✓					✓
B								✓		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
AN	✓	✓	✓	✓	✓	✓	✓														

## Higher reliability in concentration value to the conventional products.

When the conventional product was measured with CRM amino acid mixture standard solutions, the following dissociations could be shown.

**[Conventional Product]** Type AN-2 (Code No. 011-14463), Type B (Code No. 012-08643), Type H (Code No. 019-08393)  
By using CRM amino acid mixture standard solutions, such deviations can be eliminated and makes it possible to perform highly reliable analysis.

Constituent	Concentration of CoA (μmol/mL)	Dissociation of measured value and concentration of CoA <sup>*1</sup>	Constituent	Concentration of CoA (μmol/mL)	Dissociation of measured value and concentration of CoA <sup>*1</sup>	Constituent	Concentration of CoA (μmol/mL)	Dissociation of measured value and concentration of CoA <sup>*1</sup>	Constituent	Concentration of CoA (μmol/mL)	Dissociation of measured value and concentration of CoA <sup>*1</sup>
<b>■ Type AN</b>						<b>■ Type B</b>			<b>■ Type H</b>		
P-Ser	1.25	-	Abu	1.26	min. 2%, max. 5%	4Abu	2.51	-	Asp	2.50	-
Tau	1.26	-	Val	2.51	-	MEA	2.51	-	Thr	2.50	-
PEA	1.26	min. 2%, max. 5%	(Cys) <sub>2</sub>	2.50	-	NH <sub>4</sub>	2.50	-	Ser	2.50	-
Urea	50	min. 5%	Met	2.51	-	5Hyl	2.50	-	Glu	2.50	-
Asp	2.51	-	Hcy(Ala)	1.25	min. 2%, max. 5%	Orn	2.51	-	Gly	2.50	-
Thr	2.51	min. 2%, max. 5%	Ile	2.51	-	Lys	2.51	-	Ala	2.50	-
Ser	2.51	-	Leu	2.51	-	1MeHis	2.50	min. 2%, max. 5%	Val	2.50	-
Glu	2.49	-	Tyr	2.50	-	His	2.50	min. 2%, max. 5%	(Cys) <sub>2</sub>	2.50	-
Sar	6.28	min. 2%, max. 5%	Phe	2.50	-	3MeHis	2.51	-	Met	2.50	-
Aad* <sup>2</sup>	1.24	-	bAla	2.51	min. 2%, max. 5%	Ans	2.49	min. 2%, max. 5%	Ile	2.50	-
Gly	2.51	-	bAib	2.49	min. 5%	Car	2.49	min. 2%, max. 5%	Leu	2.50	-
Ala	2.51	-	Hyp	2.51	min. 2%, max. 5%	Arg	2.50	-	Tyr	2.50	-
Cit	2.49	-	Pro	2.51	-				Phe	2.50	-

Conventional Product (Lot No. KCP0035), CRM (Lot No. KCE2923)

Conventional Product (Lot No. KCP0033), CRM (Lot No. ESQ6028)

Conventional Product (Lot No. KCN6130): CRM (Lot No. KCE2924)

\*1 - : No significant difference

\*2 It is not included in the CRM amino acid mixture standard solution.

Listed products are intended for laboratory research use only, and not to be used for drug, food or human use. / Please visit FUJIFILM Wako Laboratory Chemicals site: <https://labchem-wako.fujifilm.com/> / This leaflet may contain products that cannot be exported to your country due to regulations. / Bulk quote requests for some products are welcomed. Please contact us.

## FUJIFILM Wako Laboratory Chemicals site

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