iCheck Carotene
Product Information

iCheck Carotene is a portable photometer for the quantitative determination of total carotenoids in foods and biological fluids.

HOW DOES IT WORK?

iCheck consists of 2 parts: a ready-to-use reagent vial and a device. The sample is injected into the reagent vial where carotenoids are extracted. The vial is inserted into the device that measures concentration of carotenoids in the vial.

1. Injection | 2. Reaction | 3. Measurement

PRODUCT DETAILS

iCheck Carotene measures quantitatively the colour reaction in the reagent vials and displays the total carotenoids content in mg/L. iCheck devices come in a portable case with all necessary accessories.

iCheck reagent vials contain a patented mixture of reagents. They come in a box (**Test Kit**) sufficient for 100 analyses. The reagent's shelf-life is 12 months at room temperature.

BENEFITS

- **Speed:** result in less than 10 minutes
- **Economy:** cost is only 10% of conventional lab. methods
- **Easy implementation:** only 1 day training required
- **Scalability:** no set up calibration required

OUR SERVICES

Free-of-charge customer tech support:

- Online demos and trainings (i.e. Zoom)
- Instant support via WhatsApp: +49 3328 35150034
- Support with analysis, calculations, interpretation of standards, sampling protocols, technical consultations about the micronutrients

On-site Training

Feasibility testing for new matrices

iChecks are manufactured in Germany, used in over 80 countries and validated against standard laboratory methods. Learn more at **www.bioanalyt.com/products**

measure for life

For orders, technical assistance or any other inquiries contact BioAnalyt at:
contact@bioanalyt.com • +(49) 33 28 35 15 000 • www.bioanalyt.com

BioAnalyt

iCheck Carotene

Technical Data

Quality assurance

iCheck and iCheck Carotene reagent vials are produced according to quality management system (DIN EN ISO 9001:2015) certified by TÜV Nord in Germany.

TECHNICAL DATA	
Sample	
Analyte:	Total carotenoids
Sample:	Food: Premix, roots (i.e. cassava), beverages, eggs, salmon; Biological fluids: colostrum, cattle whole blood & serum
Sample preparation:	For solid or highly concentrated samples: dilution in distilled or bottled water
Sample volume per analysis:	0.4 mL (400 µL)
Concentration range:	>0.15 ppm (mg/kg), samples above 15.0 ppm must be diluted in water
Device	
Analytical method:	Photometric determination of total carotenoid concentration using absorption at 450 and 525nm.
Units displayed:	mg/L
Linear range:	0.15 - 15.00 mg/L
Calibration:	Factory set (standards included for control)
Time per analysis:	< 10 min
Environment:	20 –30°C, no direct sunlight
Accuracy at 95% confidence interval at 25°C:	±5-20% (depends on the sample type and concentration)
Method comparison:	High-performance liquid chromatography (HPLC)
User training:	1 day training
Use:	Laboratory and field
Data output:	Sample #, Batch #, Result, Date, Time (in transferred data)
Connectivity and data:	Results are stored in the device and transferred to a PC via USB
Power source:	NiMH rechargeable batteries included; AA 1.2 or 1.5V
Warranty:	2 years
Device weight:	0.45 kg
Device dimensions:	11 x 4 x 20 cm (W x H x L)
Test Kit	
Content:	100 reagent vials; 100 syringes - 1.0 mL; 100 needles - 1.6mm x 25mm.
Chemical composition:	n-Hexan and alcohols
Volume per reagent vial:	2.0 mL
Shelf life:	12 months at 20 –30°C, no direct sunlight, upright
Dimension of test kit:	26 x 14.5 x 16.5 cm
Disposal instructions:	Hazardous waste
Optional equipment:	Manual centrifuge, 50 mL falcons, weighing dishes, reference samples