

Bile Acids calibrator set (RUO) – Instructions for use

Product number: 20820

Product description

A set of seven lyophilized calibration standards (seven different concentration levels) for the absolute quantification of 20 specific bile acids in a variety of application areas, such as biomarker discovery, disease phenotyping, clinical research, or pharmaceutical R&D. The concentration ranges have been developed around the biological variance in human plasma.

Intended use

The calibrator set is intended to be used in a research or clinical laboratory by qualified personnel for the quantitative determination of bile acids. The product is used to establish a calibration curve for interpolating bile acids concentrations in human plasma via liquid chromatography – tandem mass spectrometry (LC-MS/MS) systems. The best performance can be achieved in combination with the biocrates quality control set and internals standards. It is intended for research use only and not for diagnostic applications. Use of this product outside its intended use is the sole responsibility of the user.

Reconstitution

- Add 200 µL of **50% methanol** (in water) to each calibration standard vial.
- Vortex for 10 sec.
- Shake for 10 min at 650 rpm.
- Gently tap the tubes on the table or use a centrifuge to make sure that the solution is at the bottom of the tube before use.

Storage and stability

- 6 months after shipping date when stored at -20 °C
- 12 months after shipping date when stored at -80 °C
- 1 week after reconstitution when stored at +4-8 °C

Concentrations [$\mu\text{mol/L}$]

LOT 1047967450

	Substance	Abbrev.	Cal 1	Cal 2	Cal 3	Cal 4	Cal 5	Cal 6	Cal 7
1	Cholic acid	CA	0.03	0.06	0.3	3.75	15	37.5	75
2	Chenodeoxycholic acid	CDCA	0.02	0.04	0.2	1.5	6.0	15	30
3	Deoxycholic acid	DCA	0.02	0.04	0.2	0.5	2.0	5.0	10
4	Glycocholic acid (Na salt)	GCA	0.03	0.06	0.3	3.75	15	37.5	75
5	Glychenodeoxycholic acid (Na salt)	GCDCA	0.02	0.04	0.2	1.0	4.0	10	20
6	Glycodeoxycholic acid (Na salt)	GDCA	0.01	0.02	0.1	0.5	2.0	5.0	10
7	Glycolithocholic acid	GLCA	0.01	0.02	0.1	0.25	1.0	2.5	5.0
8	Glycoursodeoxycholic acid	GUDCA	0.01	0.02	0.1	0.5	2.0	5.0	10
9	Hyodeoxycholic acid	HDCA	0.01	0.02	0.1	0.25	1.0	2.5	5.0
10	Lithocholic acid	LCA	0.01	0.02	0.1	0.25	1.0	2.5	5.0
11	alpha-muricholic acid	α -MCA	0.005	0.01	0.05	0.25	1.0	2.5	5.0
12	beta-muricholic acid	β -MCA	0.01	0.02	0.1	0.5	2.0	5.0	10
13	omega-muricholic acid	ω -MCA	0.005	0.01	0.05	0.25	1.0	2.5	5.0
14	Taurocholic acid (Na salt)	TCA	0.02	0.04	0.2	2.5	10	25	50
15	Taurochenodeoxycholic acid (Na salt)	TCDCa	0.01	0.02	0.1	1.0	4.0	10	20
16	Taurodeoxycholic acid (Na salt hydrate)	TDCA	0.01	0.02	0.1	0.5	2.0	5.0	10
17	Taurolithocholic acid	TLCA	0.01	0.02	0.1	0.25	1.0	2.5	5.0
18	Tauro beta-muricholic acid (Na salt)	TMCA(β)	0.01	0.02	0.1	0.5	2.0	5.0	10
19	Tauroursodeoxycholic acid (Na salt)	TUDCA	0.01	0.02	0.1	0.75	3.0	7.5	15
20	Ursodeoxycholic acid	UDCA	0.02	0.04	0.2	1.5	6.0	15	30