

## Rainbow Trout Brain Subcellular fractions Product specification – Certificate of Analysis (CoA)

Lot RTB230704 (Pool of 8) Batch Release: September 8, 2023

Product information				
Product code	Product description	Amount	Protein content	
RTB-S9-3P8	Rainbow trout brain S9 fraction, mixed gender, pool of 8	0.5 mL	20 mg/mL	

## **Donor data**

Species: Rainbow trout (Oncorhynchus mykiss)

Gender: mixed gender Age: sexual immature

Pool: n = 8

Animal characteristics								
Donor	1	2	3	4	5	6	7	8
Fish weight (g)	372	473	543	478	384	357	359	319
Fish length (cm)	34	32	36	33	30	31	30	29
Gonads weight (g)	0.23	0.33	1.63	0.50	0.51	0.27	0.30	0.32
GSI (gonads weight/fish weight)	0.06	0.07	0.30	0.10	0.13	0.07	0.08	0.10
Brain weight (g)	0.31	0.31	0.31	0.27	0.28	0.31	0.27	0.26
Brain weight total (g)	2.31							

Enzyme assay results				
Enzyme (Human isoforms)	Assay	Enzyme activities (nM/min)		
		S9 Fraction		
CYP1A2	Phenacetin-O-deethylase	not detectable		
CYP2A6	Coumarin-7'-hydroxylase	not detectable		
CYP2B6	Bupropion-hydroxylase	$0.03 \pm 0.004$		
CYP2C9	Diclofenac 4'-hydroxylase	$0.19 \pm 0.02$		
CYP2C19	Mephenytoin 4'-hydroxylase	$0.07 \pm 0.01$		
CYP2E1	Chlorzoxazone 6'-hydroxylase	not detectable		
CYP3A4	Midazolam 1'-hydroxylase	not detectable		



Enzyme assay results				
Enzyme	Assay	Enzyme activities (nM/min)		
	Assay	S9 Fraction		
UDP-GT	UDP-Glucuronosyltransferase	1.24 ± 0.01		
SULT	Sulfotransferase	not detectable		

Note: Activity assays were performed at PRIMACYT GmbH. The assays were conducted at 1 mg/mL protein in 0.1 M Phosphate buffer at 14  $^{\circ}$ C for 15 min (phase I) and 30 min (phase II). Values are expressed as mean  $\pm$  SD.

Detailed animal information and husbandry conditions		
Species	Rainbow trout (Oncorhynchus mykiss)	
Vendor	Fish Aquaristikshop, Osterberg 11, 19061 Schwerin	
Food	Alkote, Allco Heimtierbedarf GmbH & Co. KG, Thedinghausen	
Light/Dark cycle	natural day / night cycle using natural light	
Husbandry	3.5 cm³ water tank	
Stocking rate (kg/m³)	$3.21 \pm 0.8$	
Water temperature (°C)	14.0 ± 1.7	
рН	$8.0 \pm 0.4$	
NH <sub>4</sub> (mg/l)	4.4 ± 3.1	
NO <sub>2</sub> (mg/l)	$1.3 \pm 1.9$	
NO <sub>3</sub> (mg/l)	1.4 ± 1.3	
Carbonate hardness (°dh)	12.9 ± 0.7	
Salinity (‰)	$0.24 \pm 0.05$	
Conductivity (µS/cm)	643.2 ± 32.8	
Acid capacity pH 4.3 (mmol/l)	$4.6 \pm 0.2$	

Animals were housed under veterinary control and allowed to acclimate  $\geq 7$  days before use. Brain tissues were obtained from a non-infectious, non-contagious, healthy animals. The animals does not originate from a facility conducting work or research with animal pathogens.

Store at -80 °C.		
This product should be considered as potential biohazard. Only intended for in vitro use.		
Issued by: M. Reu	Verified by: T. Krimmling	