

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

Lot RTL230704 (Pool of 8)

Batch Release: September 7, 2023

Product information

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

Donor data

| | |
|---|---|
| Species: Rainbow trout (<i>Oncorhynchus mykiss</i>) | 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 |
| Liver weight (g) | 5.41 | 7.77 | 7.52 | 8.68 | 6.77 | 4.07 | 6.45 | 5.44 |
| Liver weight total (g) | 52.1 | | | | | | | |

Enzyme assay results

| Enzyme (Human isoforms) | Assay | Enzyme activities (nM/min) |
|----------------------------|------------------------------|----------------------------|
| | | S9 Fraction |
| CYP1A2 | Phenacetin-O-deethylase | 0.33 ± 0.02 |
| CYP2A6 | Coumarin-7'-hydroxylase | not detectable |
| CYP2B6 | Bupropion-hydroxylase | 0.04 ± 0.001 |
| CYP2C9 | Diclofenac 4'-hydroxylase | 0.86 ± 0.09 |
| CYP2C19 | Mephenytoin 4'-hydroxylase | not detectable |
| CYP2E1 | Chlorzoxazone 6'-hydroxylase | 0.16 ± 0.002 |
| CYP3A4 | Midazolam 1'-hydroxylase | 0.08 ± 0.01 |

| Enzyme assay results | | |
|----------------------|-----------------------------|----------------------------|
| Enzyme | Assay | Enzyme activities (nM/min) |
| | | S9 Fraction |
| UDP-GT | UDP-Glucuronosyltransferase | 442.32 ± 62.32 |
| SULT | Sulfotransferase | 9.04 ± 0.71 |

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 °C for 15 min (phase I) and 30 min (phase II). Values are expressed as mean ± SD.

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

Animals were housed under veterinary control and allowed to acclimate ≥ 7 days before use. Liver tissues were obtained from non-infectious, non-contagious, healthy animals. The animals do 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

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