

CERTIFICATE OF ANALYSIS

CRYOPLATEABLE HUMAN HEPATOCYTES

formation in polarized hepatocytes

FOR RESEARCH USE ONLY. CAUTION: Not intended for human diagnostic or therapeutic uses. Users should treat all human cells as potential pathogens. Wear protective clothing and eyewear. Practice appropriate disposal techniques for potentially pathogenic or bio-hazardous materials.

Lot identifier:
Post-thaw confluency ≥% on day 5
COD:
Culture negative for: Gram+, Gram-, Mycoplasm, Fungi
Recommended thaw medium:

METABOLIC ACTIVITY

ENZYME	SUBSTRATE	CONCENTRATION (μM)	ENZYME ACTIVITY (pmole/min/million cells)
CYP1A2	Phenacetin	100	
CYP2B6	Bupropion	500	
CYP2C8	Amodiaquine	20	

METABOLIC ACTIVITY (cont.)

ENZYME	SUBSTRATE	CONCENTRATION (μM)	ENZYME ACTIVITY (pmole/min/million cells)
CYP2C9	Diclofenac	25	
CYP2C19	S-mephenytoin	250	
CYP2D6	Dextromethorphan	15	
CYP3A4	Testosterone	100	
CYP3A4	Midazolam	20	
Phase I CYP	7-ethoxycoumarin	100	
SULT	7-hydroxycoumarin sulfation	100	
UGT	7-hydroxycoumarin glucuronidation	100	
AO	Zoniporide	100	

Hepatocytes in suspension (0.5 million/mL) were incubated with substrate at 37°C in 5% CO₂ and 90% humidity for 30 minutes, respectively. The concentrations of the metabolites were determined using LC-MS/MS methods.

ENZYME INDUCTION ACTIVITY

ENZYME	TREATMENT	mRNA FOLD-CHANGE
CYP1A2	Omeprazole (25 µM)	
CYP2B6	Phenobarbital (2 mM)	
CYP3A4	Rifampin (10 μM)	

Hepatocytes were seeded on a 24-well plate pre-coated with collagen I, and cultured for 48 hours at 37° C in 5% CO2 and 90% humidity. The hepatocytes were then incubated at 37° C in 5% CO2 and 90% humidity with omeprazole (25μ M, CYP1A2), phenobarbital (2μ M, CYP2B6), rifampin (10μ M, CYP3A4) and vehicle control for 48 hours, respectively. The media were replaced every 24 hours with fresh media containing the positive inducers and vehicle. The mRNA levels of CYP1A2, CYP2B6 and CYP3A4 were determined using RT-PCR.

The cells from this lot were derived from tissue obtained from accredited institutions. Consent was obtained by these institutions from the donor or the donor's legal next of kin, for use of the tissue and its derivatives for research purposes.

Najah Abi-Gerges Date



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VP, Research & Development



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Organ: Liver

AnaBios Lot Number: 836

RESEARCH ONLY

Donor Demographic Form

D	onor	Inj	orm	atio	n
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Age:	50				Ethnicity:	Caucasian	Sex:	Male	;
Height (cm):	177				Weight (kg):	95	BMI:	30.3	
COD:	Anox	ia/Cardiovas	scular						
Consent for Research	confirm	ed through vis	sual by An	aBios Coo	rdinator (Yes or l	No): Yes			
Past Medical H	istory								
Respiratory Dis	sease	No 🗵	Yes □						
Cardiac Diseas	e	No 🗵	Yes □						
Hypertension		No 🗵	Yes □						
Neurological D	isease	No 🗵	Yes □						
Cancer		No 🗆	Yes ⊠			sis 6 years ago, 2 nd o were on face (ear a	diagnosis 4 years ago nd nose).	o, both surgically	y removed,
Diabetes		No 🗵	Yes \square						
Liver Disease		No 🗵	Yes □						
GI Disease		No 🗵	Yes \square						
Kidney Disease	•	No 🗵	Yes \square						
Urinary Tract I	Disease	No 🗵	Yes \square						
Tobacco		No □	Yes ⊠	Cigarett	es when given	on and off for 5 ye	ears		
Alcohol		No 🗆	Yes ⊠			•	able to afford or was possible, for 20 year	•	•
Drug Use		No 🗆	Yes ⊠	last use		onths; Vaped Mariji	uana daily if possible		
Medication Ho	me	No 🗆	Yes ⊠	Restoril	30mg – unk fr	equency/duration			
Comments			Severe anxiety disorder, Edema off and on in feet that appeared to be d/t alcohol and drug use. Back injury within the last year, unknown details.						
Serology									
		(Yes/No)	<u>Ne</u>	<u>gative</u>	Positive		(Yes/No)	Negative	Positive

	(Yes/No)	<u>Negative</u>	<u>Positive</u>		(Yes/No)	<u>Negative</u>	<u>Positive</u>
Anti – HCV	Yes	Negative	-	HBs Ab	No	-	-
Anti – HIV 1/2	Yes	Negative	-	HBs Ag	Yes	Negative	-
Anti – HTLV 1/2	No	-	-	RPR/STS/VDRL	Yes	Negative	-
CMV	No	-	-	HCV NAT	Yes	Negative	-
CMV IgG	Yes	-	Positive	HCV RIBA	No	-	-
CMV IgM	No	-	-	HIV NAT	Yes	Negative	-
EBNA	No	-	-	WNV IgM	No	-	-
EBV IgG	Yes	-	Positive	HBV	Yes	Negative	-
EBV IgM	No	-	-	Toxo	Yes	Negative	-
HBc Total	No	-	-	WNV NAT	Yes	Negative	-
HBc Ab IgG	Yes	Negative	-	Chagas	Yes	Negative	-
HBc Ab IgM	No	-	-	SARS-CoV-2	Yes	Negative	-

Authorized by:

8-16-2022

Date

Signature