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## Product Specification

Product Name:  
Microsomes from Liver, Pooled – from human

Product Number: **M0317**

Storage Temperature: -70 °C

TEST	Specification
Vial content	≥ 0.4
mL	
pmol/mg protein (Concentration)	≥ 200
Cytochrome P450	
pmol/mg protein (Concentration)	≥ 130
Cytochrome B5	
nmol/min/mg protein	≥ 140
(Enzyme Activity) Cytochrome C Reductase (OR) One unit will reduce 1 nanomole of Cytochrome C per minute at pH 7.4 at 37 deg C.	
pmol/min/mg protein	≥ 300
(Enzyme Activity) Phenacetin O-Deethylase (CYP1A2) One unit will produce 1.0 picomole of acetamidphenol per minute at pH 7.4 at 37 deg.	
pmol/min/mg protein	≥ 700
(Enzyme Activity) Coumarin 7-hydroxylase (CYP2A6) One unit will produce 1.0 picomole of 7-hydroxycoumarin per minute at pH 7.5 at 37 deg C.	
pmol/min/mg protein	≥ 20
(Enzyme Activity) (S)-Mephenytoin N-Demethylase (CYP2B6) One unit will produce 1.0 picomole of nirvanol per minute at pH 7.4 at 37 deg C.	
pmol/min/mg protein	≥ 50
(Enzyme Activity) Paclitaxel 6-alpha-hydroxylase (CYP2C8) One unit will produce 1.0 picomole of 6-alpha-hydroxypaclitaxel per minute at pH 7.4 at 37 deg C.	
pmol/min/mg protein	≥ 1000
(Enzyme Activity) Diclofenac 4'-Hydroxylase (CYP2C9) One unit will produce 1.0 picomole of 4'-hydroxydiclofenac per minute at pH 7.5 at 37 deg C.	

Sigma-Aldrich warrants, that at the time of the quality release or subsequent retest date this product conformed to the information contained in this publication. The current Specification sheet may be available at [Sigma-Aldrich.com](http://Sigma-Aldrich.com). For further inquiries, please contact Technical Service. Purchaser must determine the suitability of the product for its particular use. See reverse side of invoice or packing slip for additional terms and conditions of sale.



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Product Number: **M0317**

Storage Temperature: -70 °C

TEST	Specification
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pmol/min/mg protein	≥ 20
(Enzyme Activity)(S)-Mephenytoin 4'-Hydroxylase (CYP2C19) One unit will produce 1.0 picomole of 4'-hydroxymephenytoin per minute at pH 7.4 at 37 deg C.	
pmol/min/mg protein	≥ 50
(Enzyme Activity) Bufuralol 1'-Hydroxylase (CYP2D6) One unit will produce 1.0 picomole of 1'-hydroxylasebufuralol per minute at pH 7.4 at 37 deg C.	
pmol/min/mg protein	≥ 1000
(Enzyme Activity) Chlorzoxazone 6'-Hydroxylase (CYP2E1) One unit will produce 1.0 picomole of 6'-hydroxychlorzoxazone per minute at pH 7.4 at 37 deg C.	
pmol/min/mg protein	≥ 1000
(Enzyme Activity) Testosterone 6-beta-hydroxylase (CYP3A4) One unit will produce 1.0 picomole of 6-beta-hydroxytestosterone per minute at pH 7.4 at 37 deg C.	
pmol/min/mg protein	≥ 500
(Enzyme Activity) Lauric Acid 12-Hydroxylase (CYP4A11) One unit will produce 1.0 picomole of 12-Hydroxylauric acid per minute at pH 7.5 at 37 deg C.	
pmol/min/mg protein	≥ 200
(Enzyme Activity) Methyl p-Tolyl Sulfide Oxidase (FMO) One unit will produce 1.0 picomole of methyl p-tolyl sulfoxide per minute at pH 9.5 at 37 deg C.	
mg protein/ml	≥ 10
Tested For Infectious Agents	Tested

Specification: PRD.2.ZQ5.10000012206

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