

Product Information Sheet

Human UGT2B4 Baculosomes

Catalog Number	SBU02B040	Lot Number	20022602
Amount	2.5 mg protein in 0.5 ml	Storage Condition	-80°C
Product Description	Human UGT2B4 expressed in baculovirus infected insect cells (Sf-9)		
Storage Buffer	25 mM Tris-HCl (pH 7.5), 0.5 mM EDTA, 20% glycerol		

Activity Data

Activity 152.9 pmol/min/mg

Substrate 4-trifluoromethyl-7-hydroxycoumarin

Metabolite 4-trifluoromethyl-7-hydroxycoumarin glucuronide

Method : The reaction mixtures (100 μ l) containing 0.25 mg/ml protein, 50 mM Tris buffer (pH 7.5), 10 mM magnesium chloride, 25 μ g/ml alamethicin and 50 μ M 4-trifluoromethyl-7-hydroxycoumarin was preincubated at 37°C for 5 min. The reaction were initiated by the addition of 5 mM UDPGA, and the reaction were incubated at 37°C for 30 min. After incubation, the reaction was stopped by placing the incubation tube on ice, adding 100 μ l of cold acetonitrile. The mixtures were centrifuged at 20,000g for 5 min at 4°C, and the supernatants of the individuals reaction samples were injected into the LC-MS/MS.

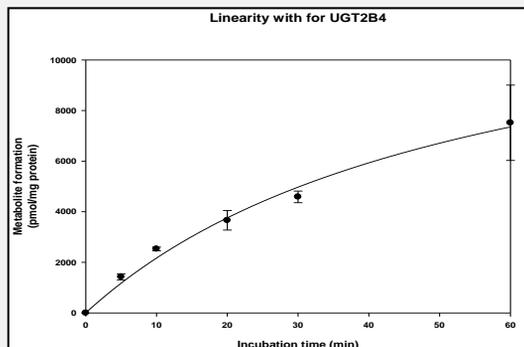


Figure 1. Time Course of Metabolite Formation. Metabolite production with 4-trifluoromethyl-7-hydroxycoumarin (50 μ M) is approximately linear for 20 minutes.

Note

1. Thaw rapidly in a 37°C water bath. Keep on ice until use.
2. If not using entire contents, aliquot to minimize freeze-thaw cycles. Less than 20% of the catalytic activity is lost after 6 freeze thaw cycles.

Technical Reference

1. J.G. Shin et al., Identification and functional characterization of novel CYP2J2 variants: G312R variant causes loss of enzyme catalytic activity. *Pharmacogenet Genomics* 15 (2005) 105-113
2. J.G. Shin et al., The CYP3A4*18 allele, the most frequent coding variant in asian populations, does not significantly affect the midazolam disposition in heterozygous individuals. *Drug Metab Dispos* 35 (2007) 2095-2101