

## Active Recombinant Cynomolgus CYP2C9 Protein

Cat. No. CYP2C9-125C    Lot. No. (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant cynomolgus CYP2C9 protein and human CYP-reductase without tag were coexpressed in E. coli.
<b>Species</b>	Cynomolgus
<b>Source</b>	E.coli
<b>Description</b>	CYP2C9 mediated oxidation of valproate, which is the minor metabolic pathway in adults, appears to become the principal route in children. Genetic and non-genetic variations in CYP2C9 activity can result in significant inter- and intra-individual differences in valproate pharmacokinetics and valproate induced adverse reactions.
<b>Bio-activity</b>	<p>Cytochrome c Reductase Activity: 191 nmol/min/mg protein</p> <p>P450 Activity Data(Unless otherwise stated, all assays are carried out at 37 centigrade in 50 mM potassium phosphate buffer (pH 7.4) containing 5 mM magnesium chloride and an NADPH generating system [5 mM glucose 6-phosphate, 1 mM NADP+, 1 U/ml glucose 6-phosphate dehydrogenase])</p> <p>Activity: Testosterone 17-oxidase</p> <p>Linear with time up to: 30 min(Determined at 15 <math>\mu</math>M substrate, using a P450 concentration of 10 pmol/ml)</p> <p>Linear with P450 up to: 50 pmol/ml(Determined at 15 <math>\mu</math>M substrate, using an incubation time of 5 min)</p> <p>Vmax: 15 pmol/min/pmol CYP</p> <p>Km: 15 <math>\mu</math>M</p>

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<b>Usage</b>	For laboratory (research) purposes only
<b>Storage</b>	Store at -80 centigrade. Avoid frequent temperature changes. Thaw on ice.
<b>Concentration</b>	P450 Concentration: 2.8 nmol/ml Protein Concentration: 9.4 mg/ml Specific P450 Content: 298 pmol/mg protein
<b>Storage Buffer</b>	50 mM Tris-acetate (pH 7.6), 250 mM sucrose, 0.25 mM EDTA

## GENE INFORMATION

<b>Gene Name</b>	CYP2C9 cytochrome P450 family 2 subfamily C member 9 [ <i>Macaca fascicularis</i> (crab-eating macaque) ]
<b>Official Symbol</b>	CYP2C9
<b>Synonyms</b>	CYP2C9; cytochrome P450 family 2 subfamily C member 9; CYP2C43; cytochrome P450 2C9-like; cytochrome P450 family 2 subfamily C member 9; cytochrome P450 2C43; cytochrome P450, family 2, subfamily C, polypeptide 9
<b>Gene ID</b>	102115450
<b>mRNA Refseq</b>	NM_001287625
<b>Protein Refseq</b>	NP_001274554
<b>UniProt ID</b>	Q0HA18

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