



## Product Information Sheet

### **Polyclonal Anti-Cytochrome P450, family 2, subfamily E, polypeptide 1, *P450II E1(CYP2E1)* (Magnetic Bead Conjugate)**

<b>Catalogue No.</b> PA1116-M	<b>Immunogen</b> A synthetic peptide mapping at the C-terminal of human P450 E1 different to the related mouse sequence by single amino acid.
<b>Lot No.</b> 08J01	
<b>Ig type:</b> rabbit IgG1	<b>Purification</b> Immunogen affinity purified.
<b>Size:</b> 100µg/Vial	<b>Contents</b> Each vial contains 1mg/ml Magnetic Bead in PBS, pH 7.2, 0.05mg NaN <sub>3</sub> .
<b>Specificity</b> Human, rat, mouse. No cross reactivity with other proteins.	<b>Storage</b> Store at 4°C for frequent use.
<b>Recommended application</b> <i>Immunoprecipitation(IP)</i>	<b>Description:</b> This Antagene antibody is immobilized by the covalent reaction of hydrazinonicotinamide-modified antibody with formylbenzamide-modified magnetic beads. It is useful for immunoprecipitation

#### **BACKGROUND**

P450IIE1, also known as CYP2E1, is a member of the P450IIE subfamily which is ethanol-inducible. It has at least 1 gene which is mapped to 10q24.3-qter, and a second is likely in rat and in man<sup>1</sup>. Both the rat and human proteins encoded by this gene contain 493 amino acids and calculated molecular masses of 56,634 and 56,916 daltons, respectively<sup>2</sup>. In addition, genetic polymorphisms in the 5-prime flanking region of the human P450IIE1 gene affected its binding of transacting factor and changed its transcriptional regulation, which may lead to interindividual differences of microsomal drug oxidation activity<sup>3</sup>. P450IIE1 is an important enzyme for the catalysis of the conversion of ethanol to acetaldehyde and to acetate in humans, and it is also involved in the metabolism of nitrosamines. Due to the possible correlation of P450IIE1 genes with malignancy, clinical studies of RFLP patterns of these genes in cancer may be useful.

#### **REFERENCE**

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- 2.Song, B.-J.; Gelboin, H. V.; Park, S.-S.; Yang, C. S.; Gonzalez, F. J. : Complementary DNA and protein sequences of ethanol-inducible rat and human cytochrome P-450s: transcriptional and post-transcriptional regulation of the rat enzyme. *J. Biol. Chem.* 261: 16689-16697, 1987.
- 3.Hayashi, S.; Watanabe, J.; Kawajiri, K. : Genetic polymorphisms in the 5-prime-flanking region change transcriptional regulation of the human cytochrome P450IIE1 gene. *J. Biochem.* 110: 559-565, 1991.

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**Contact:** Antagene, Inc. | Tel: 1 (866) 964-2589 | Fax: 1 (888) 225-1868 | Email: [Info@antageneinc.com](mailto:Info@antageneinc.com)