



CYP19A1 blocking peptide (DAG-P1390)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Antigen Description	This gene encodes a member of the cytochrome P450 superfamily of enzymes. The cytochrome P450 proteins are monooxygenases which catalyze many reactions involved in drug metabolism and synthesis of cholesterol, steroids and other lipids. This protein localizes to the endoplasmic reticulum and catalyzes the last steps of estrogen biosynthesis, three successive hydroxylations of the A ring of androgens. Mutations in this gene can result in either increased or decreased aromatase activity; the associated phenotypes suggest that estrogen functions both as a sex steroid hormone and in growth or differentiation. The gene expresses two transcript variants. [provided by RefSeq, Jul 2008]
Specificity	Brain, placenta and gonads.
Conjugate	Unconjugated
Applications	BL
Sequence Similarities	Belongs to the cytochrome P450 family.
Format	Liquid
Buffer	pH: 7.40Constituent: 5% DMF
Preservative	None
Storage	Shipped at 4°C. Store at -20°C. pH: 7.40Constituent: 5% DMF

GENE INFORMATION

Gene Name	CYP19A1 cytochrome P450, family 19, subfamily A, polypeptide 1 [Homo sapiens (human)]
Official Symbol	CYP19A1

Synonyms	CYP19A1; cytochrome P450, family 19, subfamily A, polypeptide 1; ARO; ARO1; CPV1; CYAR; CYP19; CYPXIX; P-450AROM; aromatase; estrogen synthase; estrogen synthetase; cytochrome P-450AROM; cytochrome P450 19A1; microsomal monooxygenase; flavoprotein-linked monooxygenase; cytochrome P450, subfamily XIX (aromatization of androgens);
Entrez Gene ID	1588
mRNA Refseq	NM_000103.3
Protein Refseq	NP_000094.2
UniProt ID	P11511
Chromosome Location	15q21.1
Pathway	Biological oxidations, organism-specific biosystem; C19/C18-Steroid hormone biosynthesis, pregnenolone => androstenedione => estrone, organism-specific biosystem; C19/C18-Steroid hormone biosynthesis, pregnenolone => androstenedione => estrone, conserved biosystem; Cytochrome P450 - arranged by substrate type, organism-specific biosystem; Endogenous sterols, organism-specific biosystem; Estrogen biosynthesis, organism-specific biosystem; FSH signaling pathway, organism-specific biosystem; Integr
Function	aromatase activity; electron carrier activity; heme binding; iron ion binding; oxidoreductase activity, acting on paired donors, with incorporation or reduction of molecular oxygen, reduced flavin or flavoprotein as one donor, and incorporation of one ato