

ARG22848 anti-CYP19A1 / Aromatase antibody [H4]

Package: 250 µl
Store at: -20°C

Summary

Product Description	Mouse Monoclonal antibody [H4] recognizes CYP19A1 / Aromatase Mouse anti Human Cytochrome P450 Aromatase antibody, clone H4 recognizes a conserved epitope within cytochrome P450 aromatase (P450 arom). P450 arom plays an important role in estrogen biosynthesis and is highly conserved amongst mammals. P450 arom is highly expressed in placental tissue. For tissues where there may be low expression of P450 arom, the use of microsomal extracts may improve the staining for Western blots using Mouse anti Human Cytochrome P450 Aromatase antibody, clone H4 (Turner et al. 2002).
Tested Reactivity	Hu, Ms, Rat, Bb, Bov, Chk, Goat, Hrs, Marmoset, Pig, Rb, Sheep
Tested Application	ICC/IF, IHC-Fr, IHC-P, WB
Host	Mouse
Clonality	Monoclonal
Clone	H4
Isotype	IgG2a
Target Name	CYP19A1 / Aromatase
Species	Human
Immunogen	Synthetic peptide around aa. 376 - 390 of Human CYP19A1 / Aromatase.
Conjugation	Un-conjugated
Alternate Names	ARO1; CPV1; CYAR; Aromatase; Cytochrome P450 19A1; CYP19; Cytochrome P-450AROM; P-450AROM; Estrogen synthase; EC 1.14.14.14; CYPXIX; ARO

Application Instructions

Application table	Application	Dilution
	ICC/IF	Assay-dependent
	IHC-Fr	Assay-dependent
	IHC-P	Assay-dependent
	WB	1:250
Application Note	WB: This product detects a band of approximately 55 kDa in human placental extracts. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

Properties

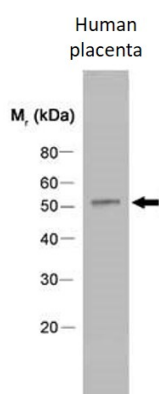
Form	Liquid
Purification	Tissue Culture Supernatant.
Buffer	Tissue Culture Supernatant and 0.1% Sodium azide

Preservative	0.1% Sodium azide
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CYP19A1
Gene Full Name	cytochrome P450, family 19, subfamily A, polypeptide 1
Background	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. 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. Alternative splicing results in multiple transcript variants. [provided by RefSeq, May 2014]
Function	Catalyzes the formation of aromatic C18 estrogens from C19 androgens. [UniProt]
Calculated Mw	58 kDa
PTM	Phosphorylated in vitro by PKA and PKG/PRKG1. These phosphorylations inhibit the catalytic activity as measured by estrone synthesis from androstenedione (36% decrease for PKA and 30% for PKG/PRKG1).

Images



ARG22848 anti-CYP19A1 / Aromatase antibody [H4] WB image

Western blot: Human placenta extract stained with ARG22848 anti-CYP19A1 / Aromatase antibody [H4].