Revision 1

#8799 Store at -20C

Aromatase Antibody

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355) orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R	Endogenous	51	Rabbit	#P11511	1588

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

Specificity / Sensitivity

Aromatase Antibody recognizes endogenous levels of total aromatase protein. This antibody also cross-reacts with a 32 kDa protein of unknown origin in some cells.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human aromatase protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

Aromatase is a member of the cytochrome P450 superfamily of enzymes, which are monooxygenases that catalyze reactions involved in drug metabolism and cholesterol and steroid synthesis (1,2). Aromatase is responsible for the conversion of testosterone into 17-β estradiol (2). Aromatase is mainly expressed in the brain (3), ovaries (4), and placenta (5). Aromatase plays an important role in development of the central nervous system during ontogenesis (6,7), gonadal development, and sex differentiation (8,9). Research studies have suggested that inhibition of aromatase may be an effective therapeutic strategy for postmenopausal breast cancers that are estrogen receptor positive (6,10). Mutations in the corresponding aromatase gene are associated with cases of aromatase excess syndrome (AEXS) and aromatase deficiency (AROD) disorders (11-14).

Background References

1. Harada, N. (1988) *Biochem Biophys Res Commun* 156, 725-32.
2. Chen, S.A. et al. (1988) *DNA* 7, 27-38.
3. Hinshelwood, M.M. et al. (2000) *Endocrinology* 141, 2050-3.
4. Pezzi, V. et al. (2003) *J Steroid Biochem Mol Biol* 87, 181-9.
5. Peruffo, A. et al. (2011) *Gen Comp Endocrinol* 172, 211-7.
6. Montelli, S. et al. (2012) *Brain Res* 1475, 11-8.
7. Kuntz, S. et al. (2003) *Cytogenet Genome Res* 101, 283-8.
8. Ramsey, M. et al. (2007) *Differentiation* 75, 978-91.
9. Hu, Q. et al. (2012) *J Med Chem* 55, 7080-9.
10. Gilani, R.A. et al. (2012) *Breast Cancer Res Treat* 135, 681-92.
11. Ito, Y. et al. (1993) *Proc Natl Acad Sci U S A* 90, 11673-7.
12. Morishima, A. et al. (1995) *J Clin Endocrinol Metab* 80, 3689-98.
13. Carani, C. et al. (1997) *N Engl J Med* 337, 91-5.
14. Fukami, M. et al. (2012) *Int J Endocrinol* 2012, 584807.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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