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Product datasheet for TA389132

Phospho-ESR1 (pTyr537) Mouse Antibody [Clone ID: M545]

Product data:

Product Type:	Primary Antibodies
Clone Name:	M545
Applications:	WB
Recommended Dilution:	**WB**: 1:1000
Reactivity:	Human, Rat, Mouse, Chicken, Xenopus
Host:	Mouse
Isotype:	IgG1
Immunogen:	Clone M545 was generated from a phospho-ERα (Tyr-537) synthetic peptide (coupled to carrier protein) corresponding to amino acids surrounding Tyr-537 in human ERα. This sequence is well conserved in rat and mouse ERα, and is also well conserved in ERβ (Tyr-488).
Specificity:	This antibody detects several forms of ERα ranging from 66 to 35 kDa* on SDS-PAGE immunoblots of MCF-7 cells treated with pervanadate, and this reactivity is removed after alkaline phosphatase treatment.
Formulation:	PBS + 1 mg/ml BSA, 0.05% NaN3 and 50% glycerol
Concentration:	lot specific
Purification:	Antigen Affinity Purified
Conjugation:	Unconjugated
Storage:	Storage at -20°C is recommended, as aliquots may be taken without freeze/thawing due to presence of 50% glycerol. Stable for at least 1 year at -20°C.
Stability:	After date of receipt, stable for at least 1 year at -20°C.
Predicted Protein Size:	35-66
Database Link:	P03372

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Background: Estrogen receptor α (ERα) is a member of the steroid receptor superfamily and its structure includes an N-terminal ligand-independent transactivation domain (AF-1), a highly conserved DNA binding domain, and a C-terminal ligand-dependent transactivation domain (AF-2). AF-1 and AF-2 activate transcription independently and synergistically, and act in a promoter- and cell-specific manner. Phosphorylation at multiple sites provides an important mechanism to regulate ERα activity. Ser-104, Ser-106, Ser-118, and Ser-167 are located in the amino-terminal transcription activation function domain AF-1, and phosphorylation of these serine residues plays an important role in regulating ERα activity. In addition to these sites, phosphorylation of Tyr-537 has been implicated in maximal hormone binding, dimerization, and transcriptional activity. Tyr-537, located in the AF-2 domain, is phosphorylated by c-Src leading to nuclear export of ERα and degradation. Thus, a variety of phosphorylation events control ERα activity.

Note: Protein G purified tissue culture supernatant.