Recombinant human Estrogen receptor

Catalog No: #AP72550

Package Size: #AP72550-1 20ug #AP72550-2 100ug #AP72550-3 1mg

Orders: order@signalwayantibody.com
Support: tech@signalwayantibody.com

Description

Product Name	Recombinant human Estrogen receptor
Brief Description	Recombinant Protein
Host Species	Yeast
Purification	Greater than 90% as determined by SDS-PAGE.
Immunogen Description	Expression Region:10-595aaSequence Info:Partial
Other Names	ER-alphaEstradiol receptor;Nuclear receptor subfamily 3 group A member 1
Accession No.	P03372
Uniprot	P03372
GeneID	2099;
Calculated MW	67.2 kDa
Tag Info	N-terminal 6xHis-tagged
Target Sequence	SGMALLHQIQGNELEPLNRPQLKIPLERPLGEVYLDSSKPAVYNYPEGAAYEFNAAAAANAQVYGQTGLPYGP GSEAAAFGSNGLGGFPPLNSVSPSPLMLLHPPPQLSPFLQPHGQQVPYYLENEPSGYTVREAGPPAFYRPNS DNRRQGGRERLASTNDKGSMAMESAKETRYCAVCNDYASGYHYGVWSCEGCKAFFKRSIQGHNDYMCPAT NQCTIDKNRRKSCQACRLRKCYEVGMMKGGIRKDRRGGRMLKHKRQRDDGEGRGEVGSAGDMRAANLWP SPLMIKRSKKNSLALSLTADQMVSALLDAEPPILYSEYDPTRPFSEASMMGLLTNLADRELVHMINWAKRVPGF VDLTLHDQVHLLECAWLEILMIGLVWRSMEHPGKLLFAPNLLLDRNQGKCVEGMVEIFDMLLATSSRFRMMNL QGEEFVCLKSIILLNSGVYTFLSSTLKSLEEKDHIHRVLDKITDTLIHLMAKAGLTLQQQHQRLAQLLLILSHIRHM SNKGMEHLYSMKCKNVVPLYDLLLEMLDAHRLHAPTSRGGASVEETDQSHLATAGSTSSHSLQKYYITGEAE GFPATV
Formulation	Tris-based buffer50% glycerol
Storage	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C,-80°C. The shelf life of lyophilized form is 12 months at -20°C,-80°C.Notes:Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.

Background

Nuclear hormone receptor. The steroid hormones and their receptors are involved in the regulation of eukaryotic gene expression and affect cellular proliferation and differentiation in target tissues. Ligand-dependent nuclear transactivation involves either direct homodimer binding to a palindromic estrogen response elent (ERE) sequence or association with other DNA-binding transcription factors, such as AP-1,c-Jun, c-Fos, ATF-2, Sp1 and Sp3, to mediate ERE-independent signaling. Ligand binding induces a conformational change allowing subsequent or combinatorial association with multiprotein coactivator complexes through LXXLL motifs of their respective components. Mutual transrepression occurs between the estrogen receptor (ER) and NF-kappa-B in a cell-type specific manner. Decreases NF-kappa-B DNA-binding activity and inhibits NF-kappa-B-mediated transcription from the IL6 promoter and displace RELA,p65 and associated coregulators from the promoter. Recruited to the NF-kappa-B response elent of the CCL2 and IL8 promoters and can displace CREBBP. Present with NF-kappa-B components RELA,p65 and NFKB1,p50 on ERE sequences. Can also act synergistically with NF-kappa-B to activate transcription involving respective recruitment adjacent response elents; the function involves CREBBP. Can activate the transcriptional activity of TFF1. Also mediates mbrane-initiated estrogen signaling involving various

kinase cascades. Isoform 3 is involved in activation of NOS3 and endothelial nitric oxide production. Isoforms lacking one or several functional domains are thought to modulate transcriptional activity by competitive ligand or DNA binding and,or heterodimerization with the full length receptor. Essential for MTA1-mediated transcriptional regulation of BRCA1 and BCAS3. Isoform 3 can bind to ERE and inhibit isoform 1

References

The DNA sequence and analysis of human chromosome 6.Mungall A.J., Palmer S.A., Sims S.K., Edwards C.A., Ashurst J.L., Wilming L., Jones M.C., Horton R., Hunt S.E., Scott C.E., Gilbert J.G.R., Clamp M.E., Bethel G., Milne S., Ainscough R., Almeida J.P., Ambrose K.D., Andrews T.D. , Ashwell R.I.S., Babbage A.K., Bagguley C.L., Bailey J., Banerjee R., Barker D.J., Barlow K.F., Bates K., Beare D.M., Beasley H., Beasley O., Bird C.P., Blakey S.E., Bray-Allen S., Brook J., Brown A.J., Brown J.Y., Burford D.C., Burrill W., Burton J., Carder C., Carter N.P., Chapman J.C., Clark S.Y., Clark G., Clee C.M., Clegg S., Cobley V., Collier R.E., Collins J.E., Colman L.K., Corby N.R., Coville G.J., Culley K.M., Dhami P., Davies J., Dunn M., Earthrowl M.E., Ellington A.E., Evans K.A., Faulkner L., Francis M.D., Frankish A., Frankland J., French L., Garner P., Garnett J., Ghori M.J., Gilby L.M., Gillson C.J., Glithero R.J., Grafham D.V., Grant M., Gribble S., Griffiths C., Griffiths M.N.D., Hall R., Halls K.S., Hammond S., Harley J.L., Hart E.A., Heath P.D., Heathcott R., Holmes S.J., Howden P.J., Howe K.L., Howell G.R., Huckle E., Humphray S.J., Humphries M.D., Hunt A.R., Johnson C.M., Joy A.A., Kay M., Keenan S.J., Kimberley A.M., King A., Laird G.K., Langford C., Lawlor S., Leongamornlert D.A., Leversha M., Lloyd C.R., Lloyd D.M., Loveland J.E., Lovell J., Martin S., Mashreghi-Mohammadi M., Maslen G.L., Matthews L., McCann O.T., McLaren S.J., McLay K., McMurray A., Moore M.J.F., Mullikin J.C., Niblett D., Nickerson T., Novik K.L., Oliver K., Overton-Larty E.K., Parker A., Patel R., Pearce A.V., Peck A.I., Phillimore B.J.C.T., Phillips S., Plumb R.W., Porter K.M., Ramsey Y., Ranby S.A., Rice C.M., Ross M.T., Searle S.M., Sehra H.K., Sheridan E., Skuce C.D., Smith S., Smith M., Spraggon L., Squares S.L., Steward C.A., Sycamore N., Tamlyn-Hall G., Tester J., Theaker A.J., Thomas D.W., Thorpe A., Tracey A., Tromans A., Tubby B., Wall M., Wallis J.M., West A.P., White S.S., Whitehead S.L., Whittaker H., Wild A., Willey D.J., Wilmer T.E., Wood J.M., Wray P.W., Wyatt J.C., Young L., Younger R.M., Bentley D.R., Coulson A., Durbin R.M., Hubbard T., Sulston J.E., Dunham I., Rogers J., Beck S.Nature 425:805-811(2003)Research Topic:Transcription

Note: This product is for in vitro research use only