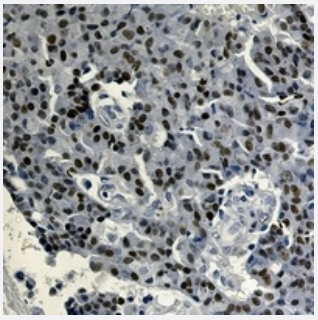
RecomAb™

# ESR1 recombinant monoclonal antibody

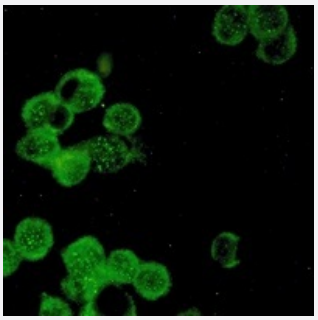
Catalog # RAB02494 Size 100 uL

## Applications



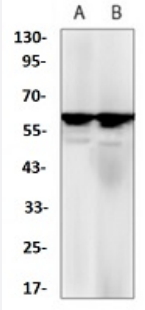
### Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

Immunohistochemical analysis of human breast carcinoma formalin fixed paraffin embedded tissue section using Estrogen Receptor alpha recombinant monoclonal antibody (Cat # RAB02494). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.11). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



### Immunofluorescence

Immunofluorescent analysis of MCF7 cells with Estrogen Receptor alpha recombinant monoclonal antibody (Cat # RAB02494). Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark.




### Western Blot (Cell lysate)

Western blot analysis of K562 (A), Hela (B) whole cell lysates with Estrogen Receptor alpha recombinant monoclonal antibody (Cat # RAB02494).

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## Specification

| | |
|---|---|
| **Product Description** | Rabbit recombinant monoclonal antibody raised against human ESR1. |
| **Antibody Species** | Rabbit |
| **Immunogen** | Original antibody is raised against a synthetic peptide of human Estrogen Receptor alpha. |
| **Theoretical MW (kDa)** | 65 |
| **Reactivity** | Human |
| **Specificity** | Recognizes endogenous levels of Estrogen Receptor alpha protein. |
| **Form** | Liquid |
| **Preparation Method** | Mammalian cell (HEK293) expression system |
| **Purification** | Immunogen affinity chromatography |
| **Isotype** | IgG |
| **Recommend Usage** | Chromatin Immunoprecipitation (1:10-1:50)<br>Immunocytochemistry (1:50-1:100)<br>Immunofluorescence (1:50-1:100)<br>Immunohistochemistry (1:50-1:100)<br>Immunoprecipitation (1:10-1:50)<br>Western Blot (1:500-1:1000)<br>The optimal working dilution should be determined by the end user. |
| **Storage Buffer** | In 50mM Tris-Glycine, pH 7.4 (0.15M NaCl, 50% Glycerol, 0.01% Sodium azide and 0.05% BSA) |
| **Storage Instruction** | Store at 4°C short term.<br>Aliquot and store at -20°C long term.<br>Avoid freeze-thaw cycles. |
| **Note** | This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which shoul d be handled by trained staff only. |

## Applications

- Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections)

  Immunohistochemical analysis of human breast carcinoma formalin fixed paraffin embedded tissue section using Estrogen Receptor alpha recombinant monoclonal antibody (Cat # RAB02494). The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.11). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

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- Immunofluorescence

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- Immunocytochemistry

- ChIP

- Immunoprecipitation

- Western Blot (Cell lysate)

  Western blot analysis of K562 (A), Hela (B) whole cell lysates with Estrogen Receptor alpha recombinant monoclonal antibody (Cat # RAB02494).

## Gene Info — ESR1

| | |
|---|---|
| **Entrez GeneID** | 2099 |
| **Protein Accession#** | P03372 |
| **Gene Name** | ESR1 |
| **Gene Alias** | DKFZp686N23123, ER, ESR, ESRA, Era, NR3A1 |
| **Gene Description** | estrogen receptor 1 |
| **Omim ID** | 133430 157300 608446 |
| **Gene Ontology** | Hyperlink |
| **Gene Summary** | This gene encodes an estrogen receptor, a ligand-activated transcription factor composed of several domains important for hormone binding, DNA binding, and activation of transcription. The protein localizes to the nucleus where it may form a homodimer or a heterodimer with estrogen receptor 2. Estrogen and its receptors are essential for sexual development and reproductive function, but also play a role in other tissues such as bone. Estrogen receptors are also involved in pathological processes including breast cancer, endometrial cancer, and osteoporosis. Alternative splicing results in several transcript variants, which differ in their 5' UTRs and use different promoters. [provided by RefSeq |
| **Other Designations** | OTTHUMP00000017718\|OTTHUMP00000017719\|estrogen receptor alpha |

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## Disease

- Abortion
- Acute Disease
- Adenocarcinoma
- Alveolar Bone Loss
- Alzheimer disease
- Amphetamine-Related Disorders
- Anorexia Nervosa
- Antisocial Personality Disorder
- Aortic Aneurysm
- Arteriosclerosis
- Arthritis
- Asperger Syndrome
- Asthma
- Atherosclerosis
- Atrial Fibrillation
- Atrophy
- Autistic Disorder
- Azoospermia
- beta-Thalassemia
- Biliary Tract Neoplasms
- Bipolar Disorder
- Body Weight
- Bone Diseases
- Bone Neoplasms

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- Bone Resorption
- Borderline Personality Disorder
- Brain Ischemia
- Breast cancer
- Breast Neoplasms
- Bronchial Hyperreactivity
- Bulimia
- Cadmium Poisoning
- Calcinosis
- Carcinoma
- Cardiomyopathy
- Cardiovascular Diseases
- Carotid Artery Diseases
- Carotid Stenosis
- Cell Transformation
- Cellulitis
- Cerebral Hemorrhage
- Cerebral Infarction
- Cerebrovascular Accident
- Child Behavior Disorders
- Cholestasis
- Chorioamnionitis
- Chronic Disease
- Cleft Lip
- Cleft Palate
- Cognition

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- Cognition Disorders
- Colon cancer
- Colonic Neoplasms
- Colorectal Neoplasms
- Coronary Artery Disease
- Coronary Disease
- Coronary Restenosis
- Coronary Stenosis
- Coronary Thrombosis
- Cryptorchidism
- Cystic fibrosis
- Death
- Dementia
- Depression
- Depressive Disorder
- Diabetes Complications
- Diabetes Mellitus
- Diabetic Nephropathies
- Disease Progression
- Disease Susceptibility
- Diseases in Twins
- Down Syndrome
- Drug Hypersensitivity
- Ductus Arteriosus
- Dyskinesia
- Dyslipidemias

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- Dysmenorrhea
- Edema
- Endometrial Neoplasms
- Endometriosis
- Esophageal Neoplasms
- Facial Pain
- Femoral Neck Fractures
- Fetal Membranes
- Fluorosis
- Fractures
- Gallstones
- Gender Identity
- Genetic Predisposition to Disease
- Genetics
- Genital Neoplasms
- Glaucoma
- Glomerulonephritis
- Graft vs Host Disease
- Graves Disease

- Heart Diseases
- Hepatitis B
- Hip Dislocation
- Hip Fractures
- Hot Flashes
- Hyperlipidemias

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- Hyperlipoproteinemia Type II
- Hyperplasia
- Hypersensitivity
- Hypertension
- Hypertrophy
- Hypospadias
- Infant
- Infertility
- Inflammation
- Insulin Resistance
- Intervertebral Disk Displacement
- Kidney Failure
- Kidney Neoplasms
- Leiomyoma
- Leiomyomatosis
- Liver Cirrhosis
- Liver Neoplasms
- Lung Neoplasms
- Lupus Erythematosus
- Lupus Nephritis
- Lymphatic Metastasis
- Lymphoma
- Macular Degeneration
- Memory
- Menstruation Disturbances
- Mental Disorders

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- Mental Status Schedule
- Metabolic Syndrome X
- Microsatellite Instability
- Migraine Disorders
- Migraine with Aura
- Migraine without Aura
- Mood Disorders
- Multiple Sclerosis
- Myasthenia Gravis
- Myocardial Infarction
- Myocardial Ischemia
- Neoplasm Invasiveness
- Neoplasm Metastasis
- Neoplasm Recurrence
- Neoplasms
- Neuropsychological Tests
- Neurotic Disorders
- Obesity
- Obstetric Labor
- Oligospermia
- Ossification of Posterior Longitudinal Ligament
- Osteoarthritis
- Osteonecrosis
- Osteoporosis
- Ovarian cancer
- Ovarian Failure

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- Ovarian Neoplasms
- Overweight
- Parkinson disease
- Periodontitis
- Peripheral Vascular Diseases
- Personality Assessment
- Personality Inventory
- Polycystic Ovary Syndrome
- Precancerous Conditions
- Pre-Eclampsia
- Pregnancy Complications
- Premature Birth
- Premenstrual Syndrome
- Primary Ovarian Insufficiency
- Prostate cancer
- Prostatic Neoplasms
- Psychiatric Status Rating Scales
- Psychological Tests
- Psychoses
- Psychotic Disorders
- Puberty
- Puerperal Disorders
- Pulmonary Disease
- Rectal Neoplasms
- Recurrence
- Retinoblastoma

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- Retinopathy of Prematurity
- Schizophrenia
- Scleroderma
- Scoliosis
- Seminoma
- Sleep Disorders
- Social Perception
- Spinal Fractures
- Spinal Osteophytosis
- Stomach Neoplasms
- Stress
- Stroke
- Substance-Related Disorders
- Temporomandibular Joint Disorders
- Tension-Type Headache
- Testicular Neoplasms
- Thalassemia
- Thrombophilia
- Thrombosis
- Thyroid Neoplasms
- Tobacco Use Disorder
- Tooth Loss
- Urinary Bladder Neoplasms
- Urinary Calculi
- Uterine Diseases
- Uterine Neoplasms

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- Varicose Ulcer
- Venous Thrombosis
- Vertigo
- Vision Disorders
- Vitiligo
- Weight Gain
- Werner syndrome
- Yang Deficiency
- Yin Deficiency

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