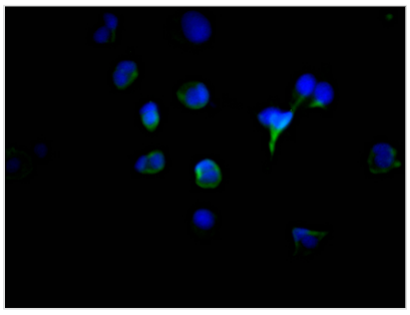
TYR Recombinant Monoclonal Antibody

Product Code	CSB-RA567167A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	P14679
Immunogen	A synthesized peptide derived from human Tyrosinase
Species Reactivity	Human
Tested Applications	ELISA, IF; Recommended dilution: IF:1:20-1:200
Relevance	This is a copper-containing oxidase that functions in the formation of pigments such as melanins and other polyphenolic compounds. Catalyzes the initial and rate limiting step in the cascade of reactions leading to melanin production from tyrosine. In addition to hydroxylating tyrosine to DOPA (3,4-dihydroxyphenylalanine), also catalyzes the oxidation of DOPA to DOPA-quinone, and possibly the oxidation of DHI (5,6-dihydroxyindole) to indole-5,6 quinone.
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Cancer; Tags & Cell Markers
Gene Names	TYR
Clone No.	6B2

Image



Immunofluorescence staining of MCF7 Cells with CSB-RA567167A0HU at 1:50, counter-stained with DAPI. The cells were fixed in 4% formaldehyde, permeated by 0.2% TritonX-100, and blocked in 10% normal Goat Serum. The cells were then incubated with the antibody overnight at 4?. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

The TYR recombinant monoclonal antibody is generated using recombinant DNA technology and is well-suited for detecting human TYR protein in ELISA

and IF applications. The gene that encodes the TYR monoclonal antibody is synthesized after sequencing the cDNA of the TYR antibody-producing hybridomas. These hybridomas are created by fusing B cells from an animal that has been immunized with a synthesized peptide derived from human TYR with myeloma cells. After the gene is synthesized, it is cloned into a vector and then transfected into cells for cultivation. The resulting TYR recombinant monoclonal antibody is subjected to purified affinity chromatography purification.

The TYR protein is an enzyme that is involved in the production of melanin, the pigment that gives color to the skin, hair, and eyes. In cells, TYR catalyzes the oxidation of tyrosine to dopaquinone, which is then further processed to produce melanin. Mutations in the TYR gene can cause various types of albinism, a genetic condition characterized by a lack of melanin in the skin, hair, and eyes. TYR is also involved in the tanning response of the skin to UV radiation, as well as in the development of melanoma, a type of skin cancer that arises from melanocytes.