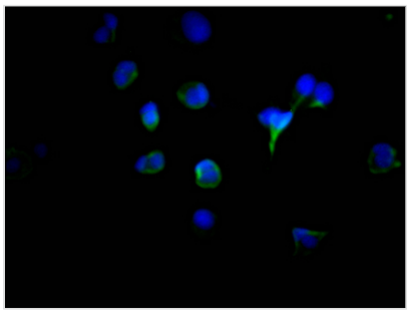
TYR Antibody

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
Accession 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°C. Nuclear DNA was labeled in blue with DAPI. The secondary antibody was FITC-conjugated AffiniPure Goat Anti-Rabbit IgG (H+L).

Description

TYR is a multi-copper enzyme that is found in a variety of organisms and is involved in both melanogenesis and enzymatic browning. It is synthesized by

epithelial, mucosal, retinal, and ciliary body melanocytes, and stored in cytoplasmic organelles. TYR has monophenolase activity, which converts monophenols to o-diphenols, as well as diphenolase activity, which converts o-diphenols to o-quinones. TYR plays a role in neurodegenerative diseases including Parkinson's disease, as well as melanin-browning reactions that are crucial in the cosmetics and food sectors.

The generation of the recombinant TYR antibody includes obtaining the TYR antibody gene, cloning the gene into a plasma vector, introducing the recombinant vector into mammalian cell lines, and achieving expression of adequate amounts of functional antibody. The recombinant TYR antibody was purified using A synthesized peptide derived from human Tyrosinase. It is reactive with the TYR protein from Human and is suitable for the use in the ELISA, IF.