

Tyrosinase Recombinant Protein | TYR recombinant protein

Recombinant Human Tyrosinase, partial

CATALOG # AAA18423	HOST E Coli or Yeast or Baculovirus or Mammalian Cell
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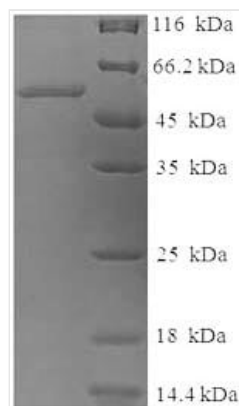
PRODUCT SYNONYMS

Tyrosinase; Recombinant Human Tyrosinase; partial; LB24-AB; Monophenol monooxygenase; SK29-AB; Tumor rejection antigen AB; TYR recombinant protein

PRODUCT SPECIFICATIONS

Host	E Coli or Yeast or Baculovirus or Mammalian Cell
Purity/Purification	Greater or equal to 85% purity as determined by SDS-PAGE.
Form/Format	Lyophilized or liquid (Format to be determined during the manufacturing process)
Sequence Positions	19-377aa; Partial
Sequence	HFPRACVSSK NLMEKECCPP WSGDRSPCGQ LSGRGSCQNI LLSNAPLGPQ FPFTGVDDRE SWPSVFYNRT CQCSGNFMGF NCGNCKFGFW GPNCTERRLL VRRNIFDLA PEKDKFFAYL TLAKHTISSD YVIPIGTYGQ MKNGSTPMFN DINIYDLFVW MHYYVSMDAL LGGSEIWRDI DFAHEAPAFI PWHRLFLRW EQEIQKLTGD ENFTIPYWDW RDAEKCDICT DEYMGQGHPT NPNLLSPASF FSSWQIVCSR LEEYNHQSL CNGTPEGPLR RNPGNHDKSR TPRLPSSADV EFCLSLTQYE SGSMDKAANF SFRNTLEGFA SPLTGIADAS QSSMHNALHI YMNGTMSQV
Preparation and Storage	Store at -20 degree C, for extended storage, conserve at -20 degree C or -80 degree C.

IMAGES



SDS-PAGE

ADDITIONAL INFORMATION

Related Product Information for TYR recombinant protein	This is a copper-containing oxidase that functions in the formation of pigments such as melanins and other polyphenolic compounds. Catalyzes the rate-limiting conversions of tyrosine to DOPA, DOPA to DOPA-quinone and possibly 5,6-dihydroxyindole to indole-5,6 quinone.
Product Categories/Family for TYR recombinant protein	Metabolism

- Organization and nucleotide sequences of the human tyrosinase gene and a truncated tyrosinase-related segment. Giebel L.B., Strunk K.M., Spritz R.A. *Genomics* 9:435-445(1991) Isolation and sequence of a cDNA clone for human tyrosinase that maps at the mouse c-albino locus. Kwon B.S., Haq A.K., Pomerantz S.H., Halaban R. *Proc. Natl. Acad. Sci. U.S.A.* 84:7473-7477(1987) Erratum Kwon B.S., Haq A.K., Pomerantz S.H., Halaban R. *Proc. Natl. Acad. Sci. U.S.A.* 85:6352-6352(1988) Induction of pigmentation in mouse fibroblasts by expression of human tyrosinase cDNA. Bouchard B., Fuller B.B., Vijayasaradhi S., Houghton A.N.J. *Exp. Med.* 169:2029-2042(1989) A single base insertion in the putative transmembrane domain of the tyrosinase gene as a cause for tyrosinase-negative oculocutaneous albinism. Chintamaneni C.D., Halaban R., Kobayashi Y., Witkop C.J., Kwon B.S. *Proc. Natl. Acad. Sci. U.S.A.* 88:5272-5276(1991) The tyrosinase gene codes for an antigen recognized by autologous cytolytic T lymphocytes on HLA-A2 melanomas. Brichard V., van Pel A., Woelfel T., Woelfel C., de Plaen E., Lethe B.G., Coulie P., Boon T.J. *Exp. Med.* 178:489-495(1993) The tyrosinase gene in gorillas and the albinism of 'Snowflake'. Martinez-Arias R., Comas D., Andres A., Abello M.-T., Domingo-Roura X., Bertranpetit J. *Pigment Cell Res.* 13:467-470(2000) Characteristic sequences in the upstream region of the human tyrosinase gene. Kikuchi H., Miura H., Yamamoto H., Takeuchi T., Dei T., Watanabe M. *Biochim. Biophys. Acta* 1009:283-286(1989) Functional analysis of the cDNA encoding human tyrosinase precursor. Takeda A., Tomita Y., Okinaga S., Tagami H., Shibahara S. *Biochem. Biophys. Res. Commun.* 162:984-990(1989) Molecular phylogenetics and the origins of placental mammals. Murphy W.J., Eizirik E., Johnson W.E., Zhang Y.-P., Ryder O.A., O'Brien S.J. *Nature* 409:614-618(2001) Molecular basis of type I (tyrosinase-related) oculocutaneous albinism mutations and polymorphisms of the human tyrosinase gene. Oetting W.S., King R.A. *Hum. Mutat.* 2:1-6(1993) Molecular basis of albinism mutations and polymorphisms of pigmentation genes associated with albinism. Oetting W.S., King R.A. *3.3.CO;2-3>Hum. Mutat.* 13:99-115(1999) Proteomic analysis of early melanosomes identification of novel melanosomal proteins. Basrur V., Yang F., Kushimoto T., Higashimoto Y., Yasumoto K., Valencia J., Muller J., Vieira W.D., Watabe H., Shabanowitz J., Hearing V.J., Hunt D.F., Appella E.J. *Proteome Res.* 2:69-79(2003) Proteomic and bioinformatic characterization of the biogenesis and function of melanosomes. Chi A., Valencia J.C., Hu Z.-Z., Watabe H., Yamaguchi H., Mangini N.J., Huang H., Canfield V.A., Cheng K.C., Yang F., Abe R., Yamagishi S., Shabanowitz J., Hearing V.J., Wu C., Appella E., Hunt D.F. *J. Proteome Res.* 5:3135-3144(2006) Detection of mutations in the tyrosinase gene in a patient with type IA oculocutaneous albinism. Spritz R.A., Strunk K.M., Giebel L.B., King R.A. *N. Engl. J. Med.* 322:1724-1728(1990) A frequent tyrosinase gene mutation in classic, tyrosinase-negative (type IA) oculocutaneous albinism. Giebel L.B., Strunk K.M., King R.A., Hanifin J.M., Spritz R.A. *Proc. Natl. Acad. Sci. U.S.A.* 87:3255-3258(1990) Tyrosinase gene mutations associated with type IB ('yellow') oculocutaneous albinism. Giebel L.B., Tripathi R.K., Strunk K.M., Hanifin J.M., Jackson C.E., King R.A., Spritz R.A. *Am. J. Hum. Genet.* 48:1159-1167(1991) Erratum Giebel L.B., Tripathi R.K., Strunk K.M., Hanifin J.M., Jackson C.E., King R.A., Spritz R.A. *Am. J. Hum. Genet.* 49:696-696(1991) Tyrosinase gene mutations in type I (tyrosinase-deficient) oculocutaneous albinism define two clusters of missense substitutions. Tripathi R.K., Strunk K.M., Giebel L.B., Weleber R.G., Spritz R.A. *Am. J. Med. Genet.* 43:865-871(1992) Homozygous tyrosinase gene mutation in an American black with tyrosinase-negative (type IA) oculocutaneous albinism. Spritz R.A., Strunk K.M., Hsieh C.-L., Sekhon G.S., Francke U. *Am. J. Hum. Genet.* 48:318-324(1991) A tyrosinase gene missense mutation in temperature-sensitive type I oculocutaneous albinism. A human homologue to the Siamese cat and the Himalayan mouse. Giebel L.B., Tripathi R.K., King R.A., Spritz R.A. *J. Clin. Invest.* 87:1119-1122(1991) Non-random distribution of missense mutations within the human tyrosinase gene in type I (tyrosinase-related) oculocutaneous albinism. King R.A., Mentink M.M., Oetting W.S. *Mol. Biol. Med.* 8:19-29(1991) Molecular analysis of type I-A (tyrosinase negative) oculocutaneous albinism. Oetting W.S., King R.A. *Hum. Genet.* 90:258-262(1992) Mutations of the tyrosinase gene in Indo-Pakistani patients with type I (tyrosinase-deficient) oculocutaneous albinism (OCA) . Tripathi R.K., Bunday S., Musarella M.A., Droetto S., Strunk K.M., Holmes S.A., Spritz R.A. *Am. J. Hum. Genet.* 53:1173-1179(1993) Mutations of the tyrosinase gene in patients with oculocutaneous albinism from various ethnic groups in Israel. Gershoni-Baruch R., Rosenmann A., Droetto S., Holmes S.A., Tripathi R.K., Spritz R.A. *Am. J. Hum. Genet.* 54:586-594(1994) Initiation codon mutation of the tyrosinase gene as a cause of human albinism. Breimer L.H., Winder A.F., Jay B., Jay M. *Clin. Chim. Acta* 227:17-22(1994) Diagnosis of oculocutaneous albinism with molecular analysis. Summers C.G., Oetting W.S., King R.A. *Am. J. Ophthalmol.* 121:724-726(1996) Apparent digenic inheritance of Waardenburg syndrome type 2 (WS2) and autosomal recessive ocular albinism (AROA) . Morell R., Spritz R.A., Ho L., Pierpont J., Guo W., Friedman T.B., Asher J.H. Jr. *Hum. Mol. Genet.* 6:659-664(1997) Novel mutations of the tyrosinase (TYR) gene in type I oculocutaneous albinism (OCA1) . Spritz R.A., Oh J., Fukai K., Holmes S.A., Ho L., Chitayat D., France T.D., Musarella M.A., Orlov S.J., Schnur R.E., Weleber R.G., Levin A.V. *3.0.CO;2-X>Hum. Mutat.* 10:171-174(1997) Mutations of the human tyrosinase gene associated with tyrosinase related oculocutaneous albinism (OCA1) . Oetting W.S., Fryer J.P., King R.A. *3.3.CO;2-7>Hum. Mutat.* 12:433-434(1998) Erratum Oetting W.S., Fryer J.P., King R.A. *Hum. Mutat.* 13:83-83(1999) Novel and recurrent mutations in the tyrosinase gene and the P gene in the German albino population. Passmore L.A., Kaesmann-Kellner B., Weber B.H.F. *Hum. Genet.* 105:200-210(1999) Erratum Passmore L.A., Kaesmann-Kellner B., Weber B.H.F. *Hum. Genet.* 108:208-208(2001) Insertion/deletion mutations of type I oculocutaneous albinism in Chinese patients from Taiwan. Tsai C.-H., Tsai F.-J., Wu J.-Y., Lin S.-P., Chang J.-G., Yang C.-F., Lee C.-C. *3.0.CO;2-3>Hum. Mutat.* 14:542-542(1999) Mutation analysis of the tyrosinase gene in oculocutaneous albinism. Camand O., Marchant D., Boutboul S., Pequignot M., Odent S., Dollfus H., Sutherland J., Levin A., Menasche M., Marsac C., Dufier J.-L., Heon E., Abitbol M. *Hum. Mutat.* 17:352-352(2001) A novel mutation of the tyrosinase gene causing oculocutaneous albinism type 1 (OCA1) . Nakamura E., Miyamura Y., Matsunaga J., Kano Y., Dakeishi-Hara M., Tanita M., Kono M., Tomita Y. *J. Dermatol. Sci.* 28:102-105(2002) Detection of 53 novel DNA variations within the tyrosinase gene and accumulation of mutations in 17 patients with albinism. Opitz S., Kaesmann-Kellner B., Kaufmann M., Schwinger E., Zuhke C. *Hum. Mutat.* 23:630-631(2004) A genomewide association study of skin pigmentation in a South Asian population. Stokowski R.P., Pant P.V.K., Dadd T., Fereday A., Hinds D.A., Jarman C., Filsell W., Ginger R.S., Green M.R., van der Ouderan F.J., Cox D.R. *Am. J. Hum. Genet.* 81:1119-1132(2007) Genetic determinants of hair, eye

NCBI AND UNIPROT INFORMATION

NCBI GI #	4507753
NCBI GeneID	7299
NCBI Accession #	NP_000363.1
NCBI GenBank Nucleotide #	NM_000372.4
UniProt Accession #	P14679; Q15675; Q15676; Q15680; Q8TAK4; Q9BYY0; Q9BZX1
Molecular Weight	42.7 kDa
NCBI Official Full Name	tyrosinase
NCBI Official Synonym Full Names	tyrosinase
NCBI Official Symbol	TYR
NCBI Official Synonym Symbols	ATN; CMM8; OCA1; OCA1A; OCAIA; SHEP3
NCBI Protein Information	tyrosinase
UniProt Protein Name	Tyrosinase
UniProt Gene Name	TYR
UniProt Entry Name	TYRO_HUMAN

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