

## TYR (R501) polyclonal antibody

Catalog: BS1484

Host: Rabbit

Reactivity: Human, Mouse, Rat

### Background:

Tyrosinase (TYR), a type I membrane protein and copper-containing enzyme, is involved in the production of melanin, the primary pigment found in vertebrates. Melanin biogenesis requires the enzymatic activity of TYR, which catalyzes the critical and rate-limiting step of tyrosine hydroxylation in the biosynthesis of melanin. Defects effecting TYR activity result in various forms of albinism. The TYR-related proteins, TRP1 and TRP2, are also specifically expressed in melanocytes, and they likewise contribute to the synthesis of melanin within the melanosomes. The TRPs, including TYR, all share a similar transmembrane region, contain two metal-binding regions and a cysteine-rich epidermal growth factor motif, and are localized in the melanosomal membrane. These proteins, however, have distinct catalytic activity, and they individually contribute to the biosynthesis of melanin biopolymers. The TRPs are believed to exist as a multi-enzyme complex, as these proteins form aggregates together, and the expression of TRP1 also helps stabilize TYR in melanocytes.

### Product:

Rabbit IgG, 1mg/ml in PBS with 0.02% sodium azide, 50% glycerol, pH7.2

### Molecular Weight:

~ 80 kDa

### Swiss-Prot:

P14679

### Purification&Purity:

The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen and the purity is > 95% (by SDS-PAGE).

### Applications:

WB: 1:500~1:1000

IHC: 1:50~1:200

IF: 1:50~1:200

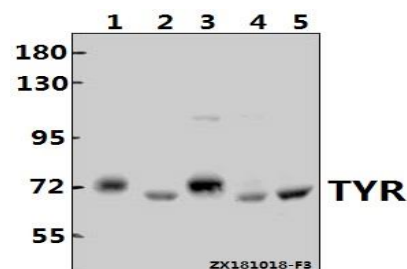
### Storage&Stability:

Store at 4 °C short term. Aliquot and store at -20 °C long term. Avoid freeze-thaw cycles.

### Specificity:

Tyrosinase (R501) polyclonal antibody detects endogenous levels of Tyrosinase protein.

### DATA:



Western blot (WB) analysis of TYR (R501) pAb at 1:500 dilution

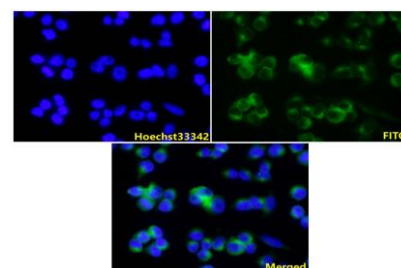
Lane1:A375 whole cell lysate(40ug)

Lane2:Podocyte whole cell lysate(40ug)

Lane3:Beas-2B whole cell lysate(40ug)

Lane4:PMVEC whole cell lysate(40ug)

Lane5:BV2 whole cell lysate(40ug)



IF image of BS1484 stained A375 cells. The cells were 4% paraformaldehyde fixed (20 min) and then incubated in 10% normal goat serum for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody TYR (R501) pAb #BS1484(1:100) at 10 µg/ml overnight at +4 °C. The secondary antibody (Green) was Goat Anti-Mouse IgG (H+L) FITC#BS10950 used at a 1/400 dilution for 2h. Hoechst33342 #BD5011 was used to stain the cell nuclei (blue).

### Note:

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## PRODUCT DATA SHEET

Bioworld Technology, Inc.

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For research use only, not for use in diagnostic procedure.

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