## For Research Use Only

## MYC tag Recombinant antibody

Catalog Number:80469-2-RR



**Basic Information** 

Catalog Number:

80469-2-RR

GenBank Accession Number:

GeneID (NCBI):

100ul , Concentration: 1000 ug/ml by Full Name: Nanodrop:

Myc tag

Rabbit

Isotype IgG

Immunogen Catalog Number:

AG9409

**Purification Method:** 

Protein A purfication

CloneNo.: 241611D1

Recommended Dilutions:

WB 1:20000-1:100000

IP 0.5-4.0 ug for 1.0-3.0 mg of total

protein lysate

IF/ICC 1:125-1:500

**Applications** 

**Tested Applications:** 

WB, IF/ICC, FC (Intra), IP, ELISA

Species Specificity: recombinant protein Positive Controls:

WB: Transfected HEK-293T cells, IP: Transfected HEK-293 cells,

IF/ICC: Transfected HEK-293 cells,

## **Background Information**

The myc-tag is a short synthetic polypeptide sequence derived from c-MYC protein that can be added to recombinant proteins to enable isolation and study when an antibody is not available. This antibody recognizes the MYC tag EQKLISEEDL MYC tag is a part of c-MYC protein. So there's weaker 62-65 kDa bands for endogenous c-MYC protein. What is the molecular weight of myc? 1203Da: the ten amino acid myc tag sequence is EQKLISEEDL (in single letter code). What are the applications for myc tag? The addition of the myc tag to a particular protein can be useful when an antibody is not available to the protein of interest. Using recombinant DNA technology, the myc tag can be fused to the protein and then an antibody against the myc tag can be used to probe (PMID: 24490106). This is a reliable method and can be used in a number of different techniques, including purification using chromatography, tracking the protein in localization studies using immunofluorescence, or quantifying levels using Western Blot (PMID: 24490106). What is the structure of myc tag? The c-myc gene from which this tag is derived has a molecular weight of 49kDa, but the myc tag represents only a small portion of the C-terminus of this gene. The short polypeptide sequence can be fused to the N-terminus or the C-terminus of any protein without influencing function, although it is advised to avoid fusing it to a secretory signal. A cleavage site behind this tag is also sometimes engineered to allow removal with a specific protease.

Storage

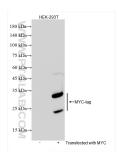
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol, pH7.3

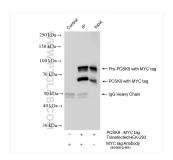
Aliquoting is unnecessary for -20°C storage

\*\*\* 20ul sizes contain 0.1% BSA

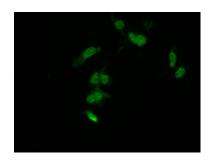
## **Selected Validation Data**



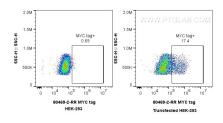
Transfected HEK-293T cells were subjected to SDS PAGE followed by western blot with 80469-2-RR (MYC tag antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



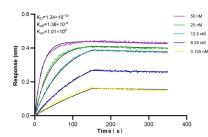
IP result of anti-MYC tag (IP:80469-2-RR, 4ug; Detection:80469-2-RR 1:5000) with Transfected HEK-293 cells lysate 1600 ug.



Immunofluorescent analysis of (4% PFA) fixed Transfected HEK-293 cells using MYC tag antibody (80469-2-RR, Clone: 241611D1) at dilution of 1:250 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2).



1x10^6 Transfected HEK-293 cells were intracellularly stained with 0.25 ug MYC tag Recombinant antibody (80469-2-RR, Clone:241611D1) and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2), and 0.25 ug Rabbit IgG Isotype Control RecAb (98136-1-RR, Clone: 240953C9). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).



Biolayer interferometry (BLL) kinetic assays of 80469-2-RR against MYC tag were performed. The affinity constant is 0.134 nM.