

Recombinant

DGRmAb®

GAPDH (DGR12320) Rabbit mAb

db12905

Package : 10µL 20µL 100µL 500µL 1mL

Product Name : GAPDH (DGR12320) Rabbit mAb**Cat.No.:** db12905**Synonyms** : G3PD; GAPD; HEL-S-162eP**Application** : WB, IHC-P, ICC/IF, FC, IP**Reactivity** : Human**Host species** : Rabbit**Background**

This gene encodes a member of the glyceraldehyde-3-phosphate dehydrogenase protein family. The encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. The product of this gene catalyzes an important energy-yielding step in carbohydrate metabolism, the reversible oxidative phosphorylation of glyceraldehyde-3-phosphate in the presence of inorganic phosphate and nicotinamide adenine dinucleotide (NAD). The encoded protein has additionally been identified to have uracil DNA glycosylase activity in the nucleus. Also, this protein contains a peptide that has antimicrobial activity against *E. coli*, *P. aeruginosa*, and *C. albicans*. Studies of a similar protein in mouse have assigned a variety of additional functions including nitrosylation of nuclear proteins, the regulation of mRNA stability, and acting as a transferrin receptor on the cell surface of macrophage. Many pseudogenes similar to this locus are present in the human genome. Alternative splicing results in multiple transcript variants. [provided by RefSeq, Nov 2014]

Immunogen

A synthetic peptide of human GAPDH

Gene ID

2597

Swiss Prot

P04406

Synonyms

G3PD; GAPD; HEL-S-162eP

Reactivity

Human

Application

WB, IHC-P, ICC/IF, FC, IP

Recommended dilution

WB: 1:2000-1:20000

IHC-P: 1:200-1:2000

ICC/IF: 1:200-1:500

FC: 1:20

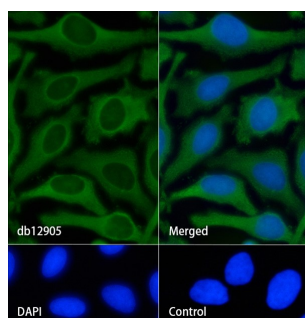
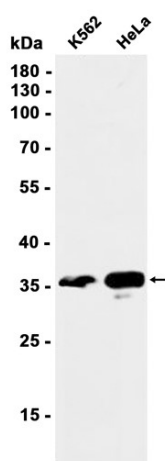
IP: 1:10-1:100

Calculated MW

36 kDa

Observed MW	36 kDa
Host species	Rabbit
Clonality	Monoclonal
Clonality No.	DGR12320
Isotype	IgG
Purity	Affinity Purification
Conjugation	Un-conjugated
Storage Stability	Store at -20°C. Supplied in 50mM Tris-Glycine(pH 7.4), 0.15M NaCl, 40% Glycerol, 0.01% sodium azide and 0.05% BSA. Stable for 12 months from date of receipt.

Western blot analysis of extracts from K562, HeLa cells using db12905 at 1:1000.



Immunofluorescence analysis of HeLa cells labelling GAPDH with db12905.

The cells were fixed with cold 100% methanol (10min, 4°C) and blocked in 1% BSA/10% normal goat serum/0.3M glycine in 0.1% PBS-Tween 20 for 1h. The cells were then incubate with db12905 (1:200) at room temperature for 1h, followed by a further incubation at room temperature for 45min with Goat Anti Rabbit IgG (H+L)-AF488 (db10005, shown in green). Nuclear DNA was labeled in blue with DAPI.

Control: Secondary antibody only.