

Recombinant

DGRmAb®

Gemin 1 (DGR13829) Rabbit mAb

db11205

Package : 10µL 20µL 50µL 100µL

Product Name : Gemin 1 (DGR13829) Rabbit mAb**Cat.No.:** db11205**Synonyms :** SMA; SMN; SMA1; SMA2; SMA3; SMA4; SMA@; SMNT; BCD541; GEMIN1; TDRD16A; T-BCD541**Application :** WB, ICC/IF**Reactivity :** Human**Host species :** Rabbit**Background**

This gene is part of a 500 kb inverted duplication on chromosome 5q13. This duplicated region contains at least four genes and repetitive elements which make it prone to rearrangements and deletions. The repetitiveness and complexity of the sequence have also caused difficulty in determining the organization of this genomic region. The telomeric and centromeric copies of this gene are nearly identical and encode the same protein. However, mutations in this gene, the telomeric copy, are associated with spinal muscular atrophy; mutations in the centromeric copy do not lead to disease. The centromeric copy may be a modifier of disease caused by mutation in the telomeric copy. The critical sequence difference between the two genes is a single nucleotide in exon 7, which is thought to be an exon splice enhancer. Note that the nine exons of both the telomeric and centromeric copies are designated historically as exon 1, 2a, 2b, and 3-8. It is thought that gene conversion events may involve the two genes, leading to varying copy numbers of each gene. The protein encoded by this gene localizes to both the cytoplasm and the nucleus. Within the nucleus, the protein localizes to subnuclear bodies called gems which are found near coiled bodies containing high concentrations of small ribonucleoproteins (snRNPs). This protein forms heteromeric complexes with proteins such as SIP1 and GEMIN4, and also interacts with several proteins known to be involved in the biogenesis of snRNPs, such as hnRNP U protein and the small nucleolar RNA binding protein. Multiple transcript variants encoding distinct isoforms have been described. [provided by RefSeq, Jul 2014]

Immunogen

A synthetic peptide of human Gemin 1

Gene ID

6606

Swiss Prot

Q16637

Synonyms

SMA; SMN; SMA1; SMA2; SMA3; SMA4; SMA@; SMNT; BCD541; GEMIN1; TDRD16A; T-BCD541

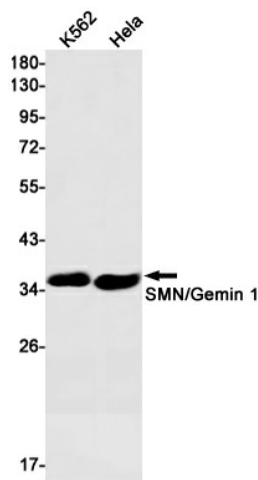
Reactivity

Human

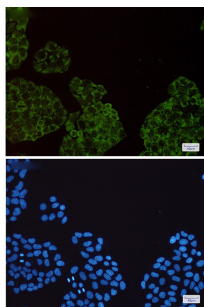
Application

WB, ICC/IF

Recommended dilution	WB: 1:1000 ICC/IF: 1:100-1:200
Calculated MW	32 kDa
Observed MW	35 kDa
Host species	Rabbit
Clonality	Monoclonal
Clonality No.	DGR13829
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 detection of SMN/Gemin 1 in K562, HeLa cell lysates using SMN/Gemin 1 antibody (1:1000 diluted).



Immunofluorescent analysis of HeLa cells using db11205 antibody (green), and DAPI (blue).