



DGRmAb<sup>®</sup>

## Gemin 1 (DGR13829) Rabbit mAb (PBS Only)

db11205-PBS Package : 100μg

Product Name: Gemin 1 (DGR13829) Rabbit mAb (PBS Only)

Cat.No.: db11205-PBS

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; 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

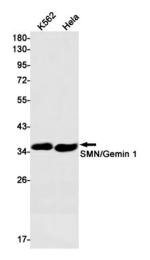
**Conjugation** Un-conjugated

Concentration 1 mg/ml

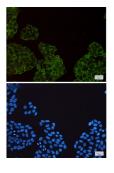
Formulation PBS Only

Storage Stability Store at -20°C. Recommended to aliquot into single-use vials. Supplied in 1X PBS (pH 7.4). BSA

and Azide Free. Stable for 12 months from date of receipt.



Western blot detection of SMN/Gemin 1 in K562, Hela cell lysates using db11205(1:1000 diluted).



Immunofluorescent analysis of HeLa cells using db11205



