## SMN2 Conjugated Antibody

Catalog No: #C27708



 Package Size:
 #C27708-AF350 100ul
 #C27708-AF405 100ul
 #C27708-AF488 100ul

 #C27708-AF555 100ul
 #C27708-AF594 100ul
 #C27708-AF647 100ul

 #C27708-AF680 100ul
 #C27708-AF750 100ul
 #C27708-Biotin 100ul

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

| Product Name          | SMN2 Conjugated Antibody  |
|-----------------------|---|
| Host Species          | Rabbit  |
| Clonality             | Polyclonal  |
| Isotype               | lgG   |
| Purification          | Affinity purification   |
| Applications          | most applications   |
| Species Reactivity    | Hu,Ms,Rt  |
| Immunogen Description | Recombinant fusion protein of human SMN2 (NP_059107.1).                                     |
| Conjugates            | Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750                                      |
| Other Names           | SMN2; BCD541; C-BCD541; GEMIN1; SMNC; TDRD16B; survival motor neuron protein                |
| Accession No.         | Swiss-Prot#:Q16637NCBI Gene ID:6607   |
| Uniprot               | Q16637  |
| GenelD                | 6606;6607;  |
| Excitation Emission   | AF350: 346nm/442nm  |
|                       | AF405: 401nm/421nm  |
|                       | AF488: 493nm/519nm  |
|                       | AF555: 555nm/565nm  |
|                       | AF594: 591nm/614nm  |
|                       | AF647: 651nm/667nm  |
|                       | AF680: 679nm/702nm  |
|                       | AF750: 749nm/775nm  |
| Calculated MW         | 35kDa   |
| Formulation           | 0.01M Sodium Phosphate, 0.25M NaCI, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide |
| Storage               | Store at 4°C in dark for 6 months   |
|                       |   |

## **Application Details**

| Suggested Dilution:                                 |
|---|
| AF350 conjugated: most applications: 1: 50 - 1: 250 |
| AF405 conjugated: most applications: 1: 50 - 1: 250 |
| AF488 conjugated: most applications: 1: 50 - 1: 250 |
| AF555 conjugated: most applications: 1: 50 - 1: 250 |
| AF594 conjugated: most applications: 1: 50 - 1: 250 |
| AF647 conjugated: most applications: 1: 50 - 1: 250 |
| AF680 conjugated: most applications: 1: 50 - 1: 250 |

Biotin conjugated: working with enzyme-conjugated streptavidin, most applications: 1: 50 - 1: 1,000

## 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. While mutations in the telomeric copy are associated with spinal muscular atrophy, mutations in this gene, the centromeric copy, do not lead to disease. This gene 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 full length 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. Four transcript variants encoding distinct isoforms have been described.

Note: This product is for in vitro research use only