#### For Research Use Only

# SMN (Human-Specific) Monoclonal antibody



Catalog Number: 60154-1-Ig

Featured Product

2 Publications

**Basic Information** 

Catalog Number: GenBank Accession Number: 60154-1-lg BC000908

GeneID (NCBI): Size: 150ul, Concentration: 2766 µg/ml by 6607 2C6D9

Nanodrop and 1000 µg/ml by Bradford<sub>Full Name</sub>:

method using BSA as the standard: survival of motor neuron 2.

Mouse Calculated MW: 282 aa, 30 kDa Isotype: IgG2a Observed MW: 38 kDa Immunogen Catalog Number:

AG14333

**Applications** 

**Tested Applications:** 

FC, IF, IHC, IP, WB, ELISA

**Cited Applications:** 

Species Specificity:

human **Cited Species:** human

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (\*) Alternatively, antigen retrieval may be performed with citrate

buffer pH 6.0

**Purification Method:** 

Protein A purification

CloneNo.:

Recommended Dilutions:

WB 1:1000-1:6000

IP 0.5-4.0 ug for IP and 1:500-1:1000

for WB IHC 1:20-1:200 IF 1:500-1:2000

Positive Controls:

WB: A375 cells, Raji cells, HEK-293 cells, HepG2 cells

IP: HEK-293 cells.

IHC: human brain tissue, human heart tissue, human

kidney tissue, human liver tissue

IF: HepG2 cells,

### **Background Information**

The survival of motor neurons (SMN) genes are the disease genes of spinal muscular atrophy (SMA), a common  $motor neuron degenerative \ disease. The level of SMN protein correlates with phenotypic severity of SMA. SMA is a small protein correlate to the small protein correlates with phenotypic severity of SMA. SMA is a small protein correlate to the small protein correlates with phenotypic severity of SMA. SMA is a small protein correlate to the small protein correlates with phenotypic severity of SMA. SMA is a small protein correlate to the small protein correlates with phenotypic severity of SMA. SMA is a small protein correlate to the small protein correlates with phenotypic severity of SMA. SMA is a small protein correlate to the small protein$ patients lack a functional SMN1 gene, but they possess an intact SMN2 gene, which though nearly identical to SMN1, is only partially functional, because a large majority of SMN2 transcripts lack exon 7, resulting in production of a truncated, less stable SMN protein. This antibody 60154-1-Ig is specific to human SMN2. It can't recognize mouse and rat SMN.

#### **Notable Publications**

| Author         | Pubmed ID | Journal       | Application |
|----------------|-----------|---------------|-------------|
| James Palacino | 26030728  | Nat Chem Biol |             |
| Mandana Arbab  | 36996170  | Science       | WB          |

Storage

Storage:

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

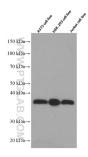
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

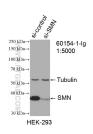
Aliquoting is unnecessary for -20°C storage

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

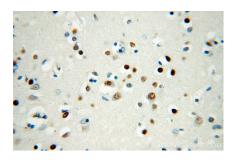
## **Selected Validation Data**



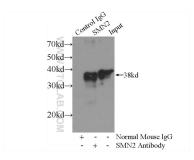
A375, HEK-293, and Jurkat cells were subjected to SDS PAGE followed by western blot with 60154-1-Ig (SMN (Human-Specific) antibody) at dilution of 1:3000 incubated at room temperature for 1.5 hours.



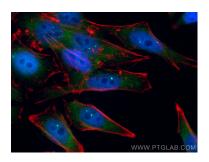
WB result of SMN (Human-Specific) antibody (60154-1-lg; 1:5000; incubated at room temperature for 1.5 hours) with sh-Control and sh-SMN (Human-Specific) transfected HEK-293 cells.



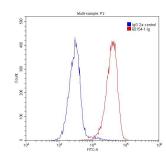
Immunohistochemical analysis of paraffinembedded human brain using 60154-1-Ig(SMN (Human-Specific) antibody) at dilution of 1:50 (under 40x lens).



IP Result of anti-SMN (Human-Specific) (IP:60154-1-Ig, 4ug; Detection:60154-1-Ig 1:500) with HEK-293 cells lysate 2440ug.



Immunofluorescent analysis of (4% PFA) fixed HepG2 cells using SMN (Human-Specific) antibody (60154-1-Ig, Clone: 2C6D9) at dilution of 1:1000 and CoraLite®488-Conjugated Affini Pure Goat Anti-Mouse IgG(H+L), CL594-Phalloidin (red).



1X10^6 Jurkat cells were stained with 0.20ug SMN (Human-Specific) antibody (60154-1-Ig, red) and control antibody (blue). Fixed with 90% MeOH.