



## Neu2 (37Y): sc-100570

### BACKGROUND

Neu2 (N-acetyl- $\alpha$ -neuraminidase 2), also known as SIAL2 (sialidase 2), is a 380 amino acid cytosolic sialidase that contains two BNR repeats and belongs to the glycosyl hydrolase 33 family. Expressed in fetal liver, skeletal muscle and an embryonic carcinoma cell line, Neu2 functions to catalytically hydrolyze sialylated compounds. More specifically, Neu2 catalyzes the hydrolysis of  $\alpha$ -(2,3),  $\alpha$ -(2,6) and  $\alpha$ -(2,8) glycosidic linkages of terminal sialic acid residues on glycoproteins, glycolipids, oligosaccharides, colominic acid and various synthetic substrates. Neu2 contains an N-linked glycosylation site, an N-terminal F/YRIP sequence motif (common to many sialidase enzymes) and two aspartic acid block consensus sequences. Human Neu2 shares over 72% sequence similarity with its rat and hamster counterparts, suggesting a conserved function between species. Expression of Neu2 in embryonic carcinomas implies a possible role in tumor formation and metastasis.

### REFERENCES

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### CHROMOSOMAL LOCATION

Genetic locus: NEU2 (human) mapping to 2q37.1.

### SOURCE

Neu2 (37Y) is a mouse monoclonal antibody raised against recombinant Neu2 of human origin.

### PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>2a</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

### APPLICATIONS

Neu2 (37Y) is recommended for detection of Neu2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu$ g per 100-500  $\mu$ g of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Neu2 siRNA (h): sc-94978, Neu2 shRNA Plasmid (h): sc-94978-SH and Neu2 shRNA (h) Lentiviral Particles: sc-94978-V.

Molecular Weight of Neu2: 42 kDa.

Positive Controls: human liver extract: sc-363766.

### RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

### STORAGE

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

### RESEARCH USE

For research use only, not for use in diagnostic procedures.

### PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.