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| <b>Catalog Number:</b>            | NB110-40764SS   |
| <b>Background:</b>                | <p>TIP47 has been described as cargo protein involved in the trafficking of the mannose-6-phosphate receptor between endosomes and the Golgi complex. Mannose 6-phosphate receptors (MPRs) deliver lysosomal hydrolase from the Golgi to endosomes and then return to the Golgi complex. The protein encoded by this gene interacts with the cytoplasmic domains of both cation-independent and cation-dependent MPRs, and is required for endosome-to-Golgi transport. This protein also binds directly to the GTPase RAB9 (RAB9A), a member of the RAS oncogene family. The interaction with RAB9 has been shown to increase the affinity of this protein for its cargo. TIP47 has been localized in milk fat globule membranes of human and bovine origin. It has been described as a placental protein, as well. Increased amounts of TIP47 are secreted into circulation of cervix carcinoma patients. Therefore, this protein is probably significant as an oncodevelopmental marker.</p> |
| <b>Alternate Names:</b>           | anti-Mannose-6-phosphate receptor-binding protein 1 antibody, anti-Cargo selection protein TIP47 antibody, anti-Tail-Interacting Protein of 47 kDa antibody   |
| <b>Research Areas:</b>            | 12,105,324,0  |
| <b>Immunogen:</b>                 | A synthetic peptide made to a region within the C-terminus (within residues 350-435) of the human TIP47 protein. [Swiss-Prot# O60664]   |
| <b>Localization:</b>              | Cytoplasm. Endosome. Membrane associated on endosomes. Detected in the envelope and the core of lipid bodies and in lipid sails.  |
| <b>Species Reactivity:</b>        | Reacts with human, primate, mouse and porcine.  |
| <b>Uses:</b>                      | <p>This antibody is useful for Western blot analysis where a band is seen at ~47 kDa, representing isoform B in both human (faint) and mouse lysates. In some samples, a ~28 kDa band may be observed which represents a splice isoform.</p> <p>* Other applications have not been tested.</p>  |
| <b>Dilutions:</b>                 | <p>Suggested working dilutions *</p> <p>Western Blot 2 ug/ml</p> <p>* Investigator should determine optimal working dilutions.</p>  |
| <b>Positive Controls:</b>         | HeLa whole cell lysate and 3T3 L1 lysate.   |
| <b>Packaging:</b>                 | 0.025 ml peptide affinity purified Rabbit antisera.   |
| <b>Concentration:</b>             | 0.93 mg/ml  |
| <b>Buffer:</b>                    | Tris-glycine, 150mM NaCl  |
| <b>Preservative:</b>              | 0.05% sodium azide  |
| <b>Storage:</b>                   | Aliquot and store at -20C or -80C. Avoid freeze-thaw cycles.  |
| <b>Novus Specific References:</b> | 1. Imanishi Y, Sun W, Maeda T, et al. Retinyl ester homeostasis in the adipose differentiation-related protein deficient retina. <i>J Biol Chem</i> 2008;M802981200.  |
| <b>General References:</b>        | 1. Diaz, E., <i>Cell</i> . 93: 433-443(1998)  |



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2. Wolins, NE, et al. JBC. 280(19): 19146

**Gene Id:** 10226

**Reference Sequence:** O60664

**Related Diseases:** Cancer, Obesity,

**Image(s)**