



## Neurogranin precursor

## Data Sheet

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|                            |   |                            |  |
|----------------------------|---|----------------------------|--|
| <b>Catalog Number:</b>     | GT41024   | <b>Host:</b>               | Goat   |
| <b>Product Type:</b>       | Affinity Purified Antibody  | <b>Species Reactivity:</b> | Human, Rat, Mouse  |
| <b>Immunogen Sequence:</b> | Peptide with sequence C-KIKSGERGRKG, from the internal region of the Neurogranin precursor protein sequence according to NP_006167.1. | <b>Format:</b>             | Liquid 200 ul. ( 0.5 mg/ml).<br>Tris saline, 0.02% sodium azide, pH 7.3,<br>0.5% BSA |
| <b>Applications:</b>       | Immunohistochemistry: 4.0-6.0 µg/ml (paraffin embedded tissue only).<br>Western Blot: 0.1-0.3 µg/ml<br>Peptide ELISA: 1:8,000.        |                            |  |
| <b>Storage:</b>            | Aliquot and store at -20°C. <i>Avoid repeated freeze-thaw cycles.</i>   |                            |  |

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### Application Notes

**Western blot:**

Approx 15kDa band observed in Human Brain (Cerebral Cortex and Hippocampus), and in Mouse Brain and Rat Brain lysates (calculated MW of 7.6kDa according to NP\_006167.1). There is also an additional 16kDa band. The observed molecular weights correspond to earlier findings in literature with different antibodies (Li et al, J Biol Chem. 1999 Jan 15;274(3):1294-300; PMID: 9880498). Recommended concentration: 0.1-0.3µg/ml.

**Immunohistochemistry:**

*Tissue Preparation:* Formalin fixation and embedding in paraffin wax.

*Tissue Sectioning:* Make 4-µm sections and place on pre-cleaned and charged microscope slides. Heat in a tissue-drying oven for 45 minutes at 60°C.

*Deparaffinization:* Wash dry slides in 3 changes of xylene – 5 minutes each at Room Temperature.

*Rehydration:* Wash slides in 3 changes of 100% alcohol – 3 minutes each at Room Temperature. Wash slides in 2 changes of 95% alcohol – 3 minutes each at Room Temperature. Wash slides in 1 change of 80% alcohol – 3 minutes at Room Temperature. Rinse slides in gentle running distilled water – 5 minutes at Room Temperature.

*Antigen retrieval:* Steam slides in 0.01 M sodium citrate buffer, pH 6.0 at 99-100°C - 20 minutes. Remove from heat and let stand at room temperature in buffer - 20 minutes. Rinse in 1X TBS with Tween (TBST) – 1 minute at Room Temperature.

*Immunostaining:* (Do not allow tissues to dry at any time during the staining procedure). Apply a universal protein block – 20 minutes at Room Temperature. Drain protein block from slides, apply diluted primary antibody – 45 minutes at Room Temperature. Rinse slides in 1X TBST - 1 minute at Room Temperature. Apply a horse-anti-goat IgG , biotin secondary (HO30002)\*– 30 minutes at Room Temperature. Rinse slides in 1X TBST - 1 minute at Room Temperature. Apply alkaline phosphatase streptavidin – 30 minutes at Room Temperature. Rinse slides in 1X TBST - 1 minute at Room Temperature. Apply alkaline phosphatase chromogen substrate – 30 minutes at Room Temperature. Wash slides in distilled water – 1 minute at Room Temperature

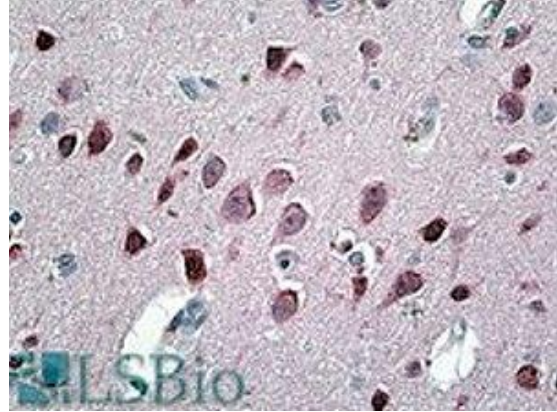
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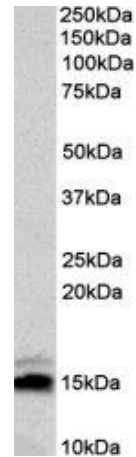
Dehydrate: (This method should only be used if the chromogen substrate is alcohol insoluble (e.g. Vector Red, DAB). Wash slides in 2 changes of 80% alcohol – 1 minute each at Room Temperature. Wash slides in 2 changes of 95% alcohol – 1 minute each at Room Temperature. Wash slides in 3 changes of 100% alcohol – 1 minute each at Room Temperature. Wash slides in 3 changes of xylene – 1 minute each at Room Temperature. Apply coverslip

\* [Horse anti-goat IgG, Biotin \(catalog# HO30002\)](#)

*Image: Neurogranin precursor (dilution: 4.0 µg/ml) staining of paraffin embedded Human Cortex. Steamed antigen retrieval with citrate buffer pH 6, AP-staining.*



*Image: Neurogranin precursor (dilution: 0.1 µg/ml) staining of Mouse Brain lysate (35µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.*



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