

DESCRIPTION

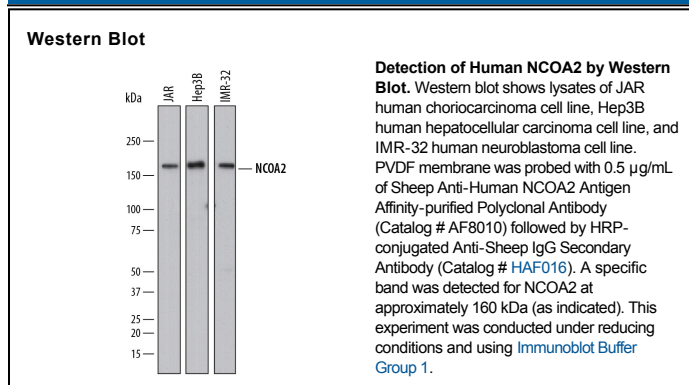
| | |
|---------------------------|---|
| Species Reactivity | Human |
| Specificity | Detects human NCOA2 in direct ELISAs and Western blots. In direct ELISAs, approximately 30% cross-reactivity with recombinant human (rh) NCOA1 is observed, and less than 1% cross-reactivity with rhNCOA4 and rhNCOA6 is observed. |
| Source | Polyclonal Sheep IgG |
| Purification | Antigen Affinity-purified |
| Immunogen | <i>E. coli</i> -derived recombinant human NCOA2 Phe1090-Leu1247 Accession # Q15596 |
| Formulation | Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS. |

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

| | Recommended Concentration | Sample |
|---------------------|----------------------------------|---------------|
| Western Blot | 0.5 µg/mL | See Below |

DATA



PREPARATION AND STORAGE

| | |
|--------------------------------|--|
| Reconstitution | Sterile PBS to a final concentration of 0.2 mg/mL. |
| Shipping | The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C |
| Stability & Storage | Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution. |

BACKGROUND

NCOA2 (Nuclear receptor COActivator 2; also TIF2 and GRIP-1) is a 150-160 kDa, ubiquitously expressed, nuclear member of the SRC/p160 nuclear receptor (NR) coactivator family of proteins. As noted, and although NCOA2 is a coactivator of hormone nuclear receptors, it also contributes to HIF-1α:Arnt driven gene transcription. With respect to NRs, it not only has intrinsic activity that directly impacts hormone receptor gene activation, but also recruits additional coactivators to the NR:p160/NCOA2 complex, imparting additional complexity to target gene expression. NCOA2 binds directly to nuclear receptors via one or more LxxLL motifs that constitute an NID (NR Interaction Domain). It further uses its C-terminus to both recruit additional coactivators such as CBP and CARM1, and to modify key chromatin sites via an intrinsic HAT activity. Human NCOA2 is 1464 amino acids (aa) in length. It contains bHLH domain (aa 26-83), a PAS region (aa 119-183), four consecutive LxxLL motifs over aa 641-882, and a C-terminal LLxxLxxxL segment (aa 1079-1087). There are five utilized Ser/Thr phosphorylation sites, and three utilized acetylation sites on Lys. NCOA2 is known to undergo translocation and fuse with KAT6A/MOZ, creating a fusion product containing aa 870-1464 of NCOA2. Over aa 1090-1247, human NCOA2 shares 94% aa sequence identity with mouse NCOA2/GRIP-1.