

DESCRIPTION

Species Reactivity	Chicken
Specificity	Detects chicken Caronte in Western blots. In this format, less than 1% cross-reactivity with recombinant human DAN and recombinant mouse Gremlin is observed.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant chicken Caronte Asp16-Asn272 Accession # NP_990154
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

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	0.1 µg/mL	Recombinant Chicken Caronte Fc Chimera (Catalog # 1051-CA)

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. 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

Chicken Caronte, the ortholog of mammalian Cerberus, is a member of the Cerberus/DAN family of secreted glycoproteins. There are at least 5 Dan Domain (DAND) family members including DAN (DAND1), Gremlin/Drm (DAND2), PRDC (Protein Related to Dan and Cerberus; DAND3), Cerberus (DAND4), and Coco (DAND5). Caronte is expressed in the left paraxial mesoderm and is the molecule responsible for transducing left-sided positional information from the node to the periphery of the lateral plate mesoderm (LPM) during chicken embryonic development. Caronte functions as a BMP antagonist, inducing Nodal and downstream genes in the LPM by interfering with the repressive activity of bilaterally-produced BMPs. In addition, antagonism of BMPs by Caronte induces the expression of the Lefty gene in the midline. Caronte binds both BMP-4 and BMP-7 in immunoprecipitation experiments.

References:

1. Pearce, J. *et al.* (1999) Dev. Biol. **209**:98.
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3. King, T. and N. Brown (1999) Nature **401**:222.
4. Ahu, L. *et al.* (1999) Curr. Biol. **9**:931.
5. Rodriguez-Esteban, C. *et al.* (1999) Nature **401**:243.