Monoclonal Anti-human Cripto-1 Antibody

**Background**
Cripto-1 is a member of the EGF-CFC family. It exists both as a secreted and as a GPI-anchored membrane protein. Cripto functions as a co-factor that modulates the activities of TGF-β family members.

**Preparation**
This antibody was produced from a hybridoma resulting from the fusion of a mouse myeloma with B cells obtained from a mouse immunized with purified, *E. coli*-derived, recombinant human Cripto-1 (rhCripto-1; aa 38 - 188; Accession # P13385). The IgG fraction of the ascites fluid was purified by Protein G affinity chromatography.

**Formulation**
Lyophilized from a 0.2 μm filtered solution in phosphate-buffered saline (PBS) with 5% trehalose.

**Reconstitution**
Reconstitute with sterile PBS. If 1 mL of PBS is used, the antibody concentration will be 500 μg/mL.

**Storage**
Lyophilized samples are stable for twelve months from date of receipt when stored at -20° C to -70° C. Upon reconstitution, the antibody can be stored at 2° - 8° C for 1 month without detectable loss of activity. Reconstituted antibody can also be aliquotted and stored frozen at -20° C to -70° C in a manual defrost freezer for six months without detectable loss of activity. Avoid repeated freeze-thaw cycles.

**Specificity**
This antibody recognizes rhCripto-1 in direct ELISAs and Western blots.

**Applications**
- **Western blot** - This antibody can be used at 1 - 2 μg/mL with the appropriate secondary reagents to detect human Cripto-1. Using a colorimetric detection system, the detection limit for rhCripto-1 is approximately 100 ng/lane and 25 ng/lane under non-reducing and reducing conditions, respectively. Chemiluminescent detection will increase sensitivity by 5 to 50 fold.
- **Direct ELISA** - This antibody can be used at 0.5 - 1.0 μg/mL with the appropriate secondary reagents to detect human Cripto-1. The detection limit for rhCripto-1 is approximately 10 ng/well.

Optimal dilutions should be determined by each laboratory for each application.