



Recombinant Protein Technical Manual

Recombinant Human HOXA1 Protein (His Tag)

RPES2158

Product Data:

Product SKU: RPES2158

Size: 20µg

Species: Human

Expression host: E. coli

Uniprot: P49639

Protein Information:

Molecular Mass: 38 kDa

AP Molecular Mass: 42 kDa

Tag: N-His

Bio-activity:

Purity: > 85 % as determined by reducing SDS-PAGE.

Endotoxin: Please contact us for more information.

Storage: Lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.

Shipping: This product is provided as lyophilized powder which is shipped with ice packs.

Formulation: Lyophilized from sterile 50mM Tris, 30% glycerol, pH 7.5

Reconstitution: Please refer to the printed manual for detailed information.

Application:

Synonyms: BSAS;HOX1;HOX1F

Immunogen Information:

Sequence: Met 1-His 335

Background:

Homeobox protein Hox-A1 is a transcription factor encoded by HOXA1 gene. This gene is one of the four types of homeobox genes each of which contains a homobox DNA sequence that codes for the homeodomain, a region of 60 amino acids responsible for the DNA binding exhibited by these homeobox proteins. These Homeobox genes are essential metazoan genes as they determine the identity of embryonic regions along the antero-posterior axis. The homeobox protein Hox-A1 may be involved in the placement of hindbrain segments in the proper location along the anterior-posterior axis during development. Early in its development, the vertebrate hindbrain is transiently subdivided into a series of compartments called rhombomeres. Genes have been identified whose expression patterns distinguish these cellular compartments. Two of these genes, Hoxa1 and Hoxa2, have been shown to be required for proper patterning of the early mouse hindbrain and the associated neural crest. It has been detected HOXA1 expression in a variety of human breast cancer lesions, suggesting that HOXA1 may be required for the establishment of breast cancer cells phenotype.