

Recombinant Protein Technical Manual Recombinant Human CD164/Endolyn Protein (His Tag) RPES3015

Product Data:

Product SKU: RPES3015 **Size:** 20μg

Species: Human Expression host: HEK293 Cells

Uniprot: Q04900

Protein Information:

Molecular Mass: 15.9 kDa

AP Molecular Mass: 4010 kDa

Tag: C-His

Bio-activity:

Purity: > 95 % as determined by reducing SDS-PAGE.

Endotoxin: $< 1.0 \text{ EU per } \mu\text{g}$ as determined by the LAL method.

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 PBS, pH 7.4

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

Application:

Synonyms: endolyn;MGC-24;MUC-24

Immunogen Information:

Sequence: Met 1-Asp 162

Background:

Sialomucin core protein 24 also known as endolyn or CD164 (cluster of differentiation 164) is a novel 80- to 90-kD mucin-like molecule expressed by human CD34+ hematopoietic progenitor cells. Isoform 1 and isoform 3 of CD164 are expressed in hematopoietic and non-hematopoietic tissues. Isoform 1 is expressed by prostate cancer tumors and prostate cancer cell lines. The expression is greater in bone metastases than in primary tumors. Expression in osseous metastasis is greater than that in soft tissue metastasis. Isoform 2 of CD164 is expressed in the small intestine, colon, lung, thyroid and in colorectal and pancreatic adenocarcinoma. Isoform 4 is expressed by both hematopoietic progenitor cells and bone marrow stromal cells. CD164 belongs to the CD164 family. The cluster of differentiation (cluster of designation) (often abbreviated as CD) is a protocol used for the identification and investigation of cell surface molecules present on white blood cells initially but found in almost any kind of cell of the body, providing targets for immunophenotyping of cells. CD164 may play an important role in prostate cancer metastasis and the infiltration of bone marrow by cancer cells. CD164 promotes myogenesis by enhancing CXCR4-dependent cell motility. This protein positively regulates myoblast migration and promotes myoblast fusion into myotubes. CD164 may play a key role in hematopoiesis by facilitating the adhesion of CD34+ cells to bone marrow stroma and by negatively regulating CD34+hematopoietic progenitor cell growth.