

DESCRIPTION

Source Chinese Hamster Ovary cell line, CHO-derived human FOLR2 protein
Gln22-His228, with a C-terminal 6-His tag
Accession # P14207

N-terminal Sequence Analysis No results obtained: Gln22 predicted

Predicted Molecular Mass 25.4 kDa

SPECIFICATIONS

SDS-PAGE 25-40 kDa, reducing conditions

Activity Measured by its binding ability in a functional ELISA.
When Folic Acid-Bovine Serum Albumin was coated at 5 µg/mL (100 µL/well), the concentration of Recombinant Human FOLR-2 that produces 50% of the optimal binding response was found to be <1 nM.

Endotoxin Level <0.01 EU per 1 µg of the protein by the LAL method.

Purity >95%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 100 µg/mL in 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.
- 3 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

Folate Receptor 2 (FOLR2), also known as Folate Receptor beta, is a 38 kDa protein that mediates the cellular uptake of folic acid and reduced folates. Dietary folates are required for many key metabolic processes including nucleotide and methionine synthesis, the interconversion of glycine and serine, and histidine breakdown (1, 2). Mature FOLR2 is an N-glycosylated protein that is anchored to the cell surface by a GPI linkage (3, 4). Human FOLR2 shares 83% amino acid sequence identity with mouse and rat FOLR2. FOLR2 is predominantly expressed in placenta, cells of the neutrophilic lineage, and some CD34+ hematopoietic progenitor cells (4 - 6). It is upregulated on myeloid leukemias, head and neck squamous cell carcinomas, and several nonepithelial cancers (3, 5, 7). It is also upregulated on macrophages and monocytes at chronic inflammatory sites including rheumatoid arthritis synovium and glioblastoma (8 - 10). FOLR2 knockout mice do not show gross morphological defects, but they exhibit increased sensitivity to arsenate-induced teratogenicity (11, 12).

References:

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