

Recombinant Protein Technical Manual Recombinant Human FUT8 Protein (aa 68-575, His Tag)(Active) RPES1932

Product Data:

| Product SKU: RPES1932 | Size: 20µg |
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Species: Human

Expression host: Baculovirus-Insect Cells

Uniprot: Q9BYC5

| Prote | an i | n Fr | rm | ЭH | $\mathbf{n}\mathbf{n}$ | |
|-------|------|------|----|--------|------------------------|--|
| | | | | C. L I | U I I | |

| Molecular Mass: | 60 kDa |
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| AP Molecular Mass: | 55 kDa |
| Tag: | C-His |
| Bio-activity: | Measured by its ability to hydrolyze the donor substrate GDP fucose. The specific activity is >0.75 pmoles/min/ μ g. |
| Purity: | > 95 % as determined by reducing SDS-PAGE. |
| Endotoxin: | < 1.0 EU per μg 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 20mM Tris, 500mM NaCl, pH 8.0, 10% gly |
| Reconstitution: | Please refer to the printed manual for detailed information. |
| Application: | |
| Synonyms: | MGC26465 |

Sequence: Arg 68-Lys 575

Background:

Alpha (1,6) fucosyltransferase 8, also known as FUT8, is a member of the glycosyltransferase family. Fucosyltransferases are the enzymes transferring fucose from GDP-Fuc to Gal in an alpha1,2-linkage and to GlcNAc in alpha1,3-linkage, alpha1,4-linkage, or alpha1,6-linkage. All fucosyltransferases utilize the same nucleotide sugar, their specificity reside in the recognition of the acceptor and in the type of linkage formed. Fucosyltransferases share some common structural and catalytic features. On the basis of protein sequence similarities, these enzymes can be classified into four distinct families: (1) the alpha-2-fucosyltransferases, (2) the alpha-3-fucosyltransferases, (3) the mammalian alpha-6-fucosyltransferases, and (4) the bacterial alpha-6-fucosyltransferases. The alpha-3-fucosyltransferases constitute a distinct family as they lack the consensus peptide, but some regions display similarities with the alpha-2 and alpha-6-fucosyltranferases.