



## Product Specification Sheet for Growth Media Supplement

**Product Identifier:** Ento-Tf Bovine Transferrin Enriched Growth Media Supplement **Source:** Recombinant, insect-derived

### Product Highlights:

Produced by the EntoEngine™ process, the Future Fields *Ento-Tf Transferrin Enriched Growth Media Supplement* comes in a 1000X concentrate, containing enough Transferrin to sustain cell culture in two and three dimensions with cross species performance equivalent or better than expensive, overpurified alternatives. Usable as a direct replacement for Transferrin protein needs, or to reduce overall requirements for serum, the *Ento-Tf Transferrin Enriched Growth Media Supplement* is the most cost effective and sustainable option for cell culture Transferrin needs on the market today.

- High bioactivity across species
- Non-mammalian origin
- Low-risk expression platform with food-safe production capability
- Production requires minimal water, energy, and waste treatment

### Description of Growth Factor Component:

**Synonyms:** Transferrin, Tf

**Description:** Transferrin is a glycoprotein that promotes cell proliferation by tightly binding and delivering iron into the cells via the Tf receptor. It is a bioactive protein intended for use in cell culture applications. Tf is an extracellular antioxidant, sequestering available iron and reducing the production of free radicals. Similarly, Tf has an antimicrobial function, impeding bacterial survival. Recombinant Bovine serotransferrin produced is a single glycosylated polypeptide chain containing 704 amino acids and having a molecular mass of 77 kDa. Transferrin is purified by a series of proprietary purification methodologies.

### Sequence (monomer):

MRPAVRALLACAVLGLCLADPERTVRWCTISTHEANKCASFRENVLRILESGPFVSCVKKTSHMDCIKAISNNEADAVTLDGGLVYEAGLKPNNLKPVVAEFHGTKDNPQ  
THYYAVAVVKKDTEFLNELRGKKSCHTGLGRSAGWNIPMAKLYKELPDPQESIQRAAANFFSASCVPCADQSSFPLKQLCAGKGTDKCACSNHEPYFGYSGAFKCLM  
EGAGDVAFVKHSTVFDNLPNPEDRKNYELLCGDNTRKNSVDDYQECYLAMVPSHAVVARTVGGKEDVIWELLNHAQEHFGKDKPDNFQFQSPHGKDLLFKDSADGFL  
KIPSKMDFELYLGYEYVTALQNLRESKPPDSSKDECMVKWCAIGHQERTKCDRWSGFSGGAIETEAENTECIAKIMKGEADAMSLDGGYLYIAGKCGLVPVLAENYKT  
EGESCKNTPEKGYLAVAVVKTSDANINWNNLKDCKKSCHTAVDRTAGWNIPMGLLYSKINNCKFDEFFSAGCAPGSPRNSLALCIGSEKGTGKECVPNSNERYGYTGA  
FRCLVEKGDVAFVKDQTVIQNTDGNNEAWAKNLKKNFEVLCKDGRKPVTDANENLARGPNHAVVSRKDKATCVEKILNKQDDFGKSVTDCTSNFCLFQSNK  
DLLFRDDTKLASIAKKTYSYLGDDYVRAMTNRQCSTSKLLEACTFHKP

### C2C12 cells

