```mathematica
Exp_m [U : U_{is_ →{i1_}}[__]] :=
 Module[{λ, μ, k, n, F, f, i, j, lhs, rhs, U1, MI
    (*multi-index*), mis, mi, yax},
  MI /: Coefficient[ℰ_, MI[p_, n_, q_]] :=
   Coefficient[Coefficient[Coefficient[ℰ, y_i, p],
     a_i, n], x_i, q];
  yax /: yax^MI[p_,n_,q_] := y_i^p a_i^n x_i^q;
  U1 = U /. (v : (y | b | t | a | x | B | T | 𝒜))_{i1} → v_i;
  F = E_{is→{i}}[];
  Do[AppendTo[F, 0]; Do[
    mis = Flatten@Table[MI[p, n, q],
       {p, 0, Min[k + 1, 2 k + 2 - 2 n]},
       {q, 0, Min[k + 1, 2 k + 2 - 2 n - p]}];
    F[[-1]] += Sum[f_mi[λ] yax^mi, {mi, mis}];
    lhs =
     (∂_μ U2l@Last[F (F /. {λ → μ, i → j}) //
              m_{i,j→i}]) /. μ → 0 /. f_[0] → 0 /.
      Table[f_mi'[0] → Coefficient[U1[[k + 1]], mi],
       {mi, mis}];
    rhs = ∂_λ U2l@Last[F];
    F =
     l2U[
      F /.
       First@
        DSolve[Table[Coefficient[lhs - rhs, mi] == 0 ∧
            f_mi[0] == 0, {mi, mis}],
          Table[f_mi, {mi, mis}], λ]],
    {n, k + 1, 0, -1}], {k, 0, Length[U1] - 1}];
  CF@l2U[F /. {λ → 1, i → i1}] ]
```