```
is_member_tail  THM

⊢  ∀eq:{T≡₂}, x:T, L:T List. x(∈eq) L ⇒ (∀y:T. x(∈eq) (y.L))
| by RepeatFor 2 (Analyze 0) THEN Equivalence -1 THEN UnivCD
|
1. T : Type
2. eq : {T≡₂}
3. eq ∈ T→T→𝔹
4. ∀x:T. eq(x,x)
5. ∀x,y:T. eq(x,y) ⟺ eq(y,x)
6. ∀x,y,z:T. eq(x,y) ⇒ eq(y,z) ⇒ eq(x,z)
7. x : T
8. L : T List
9. x(∈eq) L
10. y : T
⊢  x(∈eq) (y.L)
  by Rewrite (HigherC is_member_unrollC) 0 THEN GenConcl (eq(x,y) = b)
     THEN
     BoolInd -2
     THEN
     Rewrite
     (HigherC ifthenelse_evalC THENC TryC (HigherC assert_evalC))
     0
     THEN
     Trivial
END
```