```
list_iso_weakening_wrt_identity  THM

⊢  Discrete{T} ⇒ (∀eq:{T≡₂}, L,M:T List. L = M ⇒ L(∼eq)M)
| by UnivCD
|
1. T : Type
2. Discrete{T}
3. eq : {T≡₂}
4. L : T List
5. M : T List
6. L = M
⊢  L(∼eq)M
| by Equivalence 3 THEN HypSubst -1 0 THEN UnfoldTopAb 0
|    THEN
|    Analyze 0
|
|\
| 4. eq ∈ T→T→𝔹
| 5. ∀x:T. eq(x,x)
| 6. ∀x,y:T. eq(x,y) ⟺ eq(y,x)
| 7. ∀x,y,z:T. eq(x,y) ⇒ eq(y,z) ⇒ eq(x,z)
| 8. L : T List
| 9. M : T List
| 10. L = M
| ⊢  M(⊆eq)M
|   by BackThru
|      Thm* Discrete{T} ⇒ (∀eq:{T≡₂}, L,M:T List. L = M ⇒ L(⊆eq)M)
|      {sublist_weakening_wrt_identity}
|
.\
. 4. eq ∈ T→T→𝔹
. 5. ∀x:T. eq(x,x)
. 6. ∀x,y:T. eq(x,y) ⟺ eq(y,x)
. 7. ∀x,y,z:T. eq(x,y) ⇒ eq(y,z) ⇒ eq(x,z)
. 8. L : T List
. 9. M : T List
. 10. L = M
. ⊢  M(⊆eq)M
.   by BackThru
.      Thm* Discrete{T} ⇒ (∀eq:{T≡₂}, L,M:T List. L = M ⇒ L(⊆eq)M)
.      {sublist_weakening_wrt_identity}
END
```