```
indep_fun_extensional  THM

⊢  ∀f,g:(A→B). f = g ⟺ (∀x:A. f(x) = g(x))  by Auto
|
|\
| 1. A : Type
| 2. B : Type
| 3. f : A→B
| 4. g : A→B
| 5. f = g
| 6. x : A
| ⊢  f(x) = g(x)  by Rewrite by Hyp:5
|
.\
. 1. A : Type
. 2. B : Type
. 3. f : A→B
. 4. g : A→B
. 5. ∀x:A. f(x) = g(x)
. ⊢  f = g  by FunExtensionality
. |
. 6. x : A
. ⊢  f(x) = g(x)  by BackThru: Hyp:5
END
```