```
sfa_doc_inlist_singleton_const  THM

⊢  ∀A:Type, a:A, w:{a:A} List. ∀z:A. z ∈list w ⇒ z = a
| by Guarding (∀w:{a:A} List. <prop>) UnivCD
|
1. A : Type
2. a : A
⊢  ∀w:{a:A} List, z:A. z ∈list w ⇒ z = a
| by {a:A} ⊆ A  By (Analyze THEN Analyze-1)
|
3. {a:A} ⊆ A
⊢  ∀w:{a:A} List, z:A. z ∈list w ⇒ z = a  by ListInd Concl
|
|\
| 4. {a:A} List
| ⊢  ∀z:A. z ∈list nil ⇒ z = a  by Compute ⌈z ∈list nil⌉ *⇒ False
|
.\
. 4. {a:A} List
. 5. u : {a:A}
. 6. v : {a:A} List
. 7. ∀z:A. z ∈list v ⇒ z = a
. ⊢  ∀z:A. z ∈list u.v ⇒ z = a  by Auto
. |
. 8. z : A
. 9. z ∈list u.v
. ⊢  z = a
. | by Compute-1 ⌈z ∈list u.v⌉ *⇒ u = z ∈ A ∨ z ∈list v
. |    THEN
. |    Analyze-1
. |
. |\
. | 9. u = z ∈ A
. | ⊢  z = a  by Analyze5
. |
. .\
. . 9. z ∈list v
. . ⊢  z = a  by BackThru: Hyp:7
END
```