```
select_wf  THM

⊢  ∀A:Type, l:A List, n:ℤ. 0≤n ⇒ n<||l|| ⇒ l[n] ∈ A  by UnivCD
|
1. A : Type
2. l : A List
3. n : ℤ
4. 0≤n
5. n<||l||
⊢  l[n] ∈ A  by Unfold ‘select‘ 0
|
⊢  hd(nth_tl(n;l)) ∈ A  by Analyze
|
⊢  ||nth_tl(n;l)||≥1
| by RewriteWith []
|    [Thm* ∀as:A List, n:{0...||as||}. ||nth_tl(n;as)|| = ||as||-n
|     {length_nth_tl}]
|    0
|
⊢  ||l||-n≥1  by SupInf’
END
```