```
map_append  THM

⊢  ∀f:(A→B), as,as':A List.
|  map(f;as @ as') = (map(f;as) @ map(f;as'))  by UnivCD
|
1. A : Type
2. B : Type
3. f : A→B
4. as : A List
5. as' : A List
⊢  map(f;as @ as') = (map(f;as) @ map(f;as'))
| by ListInd 4 THEN AbReduce 0
|
|\
| ⊢  map(f;as') = map(f;as')  by Auto
|
.\
. 6. u : A
. 7. v : A List
. 8. map(f;v @ as') = (map(f;v) @ map(f;as'))
. ⊢  f(u).map(f;v @ as') = f(u).(map(f;v) @ map(f;as'))
.   by HypSubst 8 0
END
```