```
member_tag_sublist  THM

⊢  ∀E:TaggedEventStruct, tr:|E| List, x:|E|, t:Label.
|  (x ∈ <tr>_t) ⟺ (x ∈ tr) & tag(E)(x) = t
| by ...
|
|\
| 1. E : TaggedEventStruct
| 2. tr : |E| List
| 3. x : |E|
| 4. t : Label
| 5. (x ∈ tr)
| 6. tag(E)(x) =₁ t
| ⊢  tag(E)(x) = t  by EqLblFwd THEN Auto
|
.\
. 1. E : TaggedEventStruct
. 2. tr : |E| List
. 3. x : |E|
. 4. t : Label
. 5. (x ∈ tr)
. 6. tag(E)(x) = t
. ⊢  tag(E)(x) =₁ t  by HypSubstSq (-1) 0 THEN EqLblReflexive 0
END
```