```
no_mention_implies_consistent_rel  THM

⊢  ∀rho:Decl, r:rel(), da:Collection(dec()), R:(Label→Label→𝔹).
|  ¬rel_mentions_trace(r) ⇒ trace_consistent_rel(rho;da;R;r)
| by Auto THEN Unfold ‘trace_consistent_rel‘ 0 THEN Auto

|    THEN Unfold ‘trace_consistent‘ 0 THEN Auto
THEN D (-4)
|
1. Decl
2. r : rel()
3. Collection(dec())
4. Label→Label→𝔹
5. i : ℕ||r.args||
6. g : Label
7. term_mentions_guard(g;r.args[i])
⊢  rel_mentions_trace(r)
| by BackThruLemma ‘rel_mentions_trace_iff‘ THEN Auto

|    THEN InstConcl [i] THEN Auto
|
1. Decl
2. r : rel()
3. Collection(dec())
4. Label→Label→𝔹
5. i : ℕ||r.args||
6. g : Label
7. term_mentions_guard(g;r.args[i])
⊢  mentions_trace(r.args[i])  by Easy
END
```