

In [69]:

```
%reset
```

Once deleted, variables cannot be recovered. Proceed (y/[n])? y

In [22]:

```
%matplotlib inline
import numpy as np
import matplotlib.pyplot as plt
import seaborn as sns
sns.set_style("whitegrid")
```

In [23]:

```
active_margin = [(9514, 75.06832036998108), (10514, 75.6674374605844), (11514, 7
6.6449442926214),
                  (12514, 76.48728190035737), (13514, 77.58040782005466),
(14514, 77.13895312171536),
                  (15514, 77.67500525541307), (16514, 77.61194029850746),
(17514, 77.86420012612992),
                  (18514, 78.1269707799033), (19514, 78.63149043514821), (20514,
78.3056548244692)]
active_entropy = [(9514, 75.06832036998108), (10514, 76.25604372503679), (11514,
77.01282320790415),
                  (12514, 76.36115198654615), (13514, 76.88669329409292),
(14514, 77.70653773386589),
                  (15514, 77.6224511246584), (16514, 78.14799243220517), (17514,
78.19003573680891),
                  (18514, 78.66302291360101), (19514, 78.56842547824259),
(20514, 78.70506621820475)]

passive_learner = (38059,78.200546563)
```

In [24]:

```
#active_learner.append(passive_learner1)
x1 = map(lambda x : x[0], active_margin)
y1 = map(lambda x : x[1], active_margin)
z1 = map(lambda x : x[1], active_entropy)
```

In [47]:

```
plt.plot(x1, y1, 'ro-')
plt.plot(x1, z1, 'go-', lw=2)
plt.axhline(passive_learner[1], label="passive learner", linestyle='--')
plt.title("Accuracy vs data size")
plt.xlabel("Training Set Size")
plt.ylabel("Accuracy Test Set")
plt.legend(["Margin Sampling", "Entropy Sampling", "Passive Learner"], bbox_to_anchor=(1, 0.4))
plt.show()
```

